Can games train businessmen?

BUSINESS WEEK

A McGRAW-HILL PUBLICATION

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JULY 25, 1959



(Government) development.

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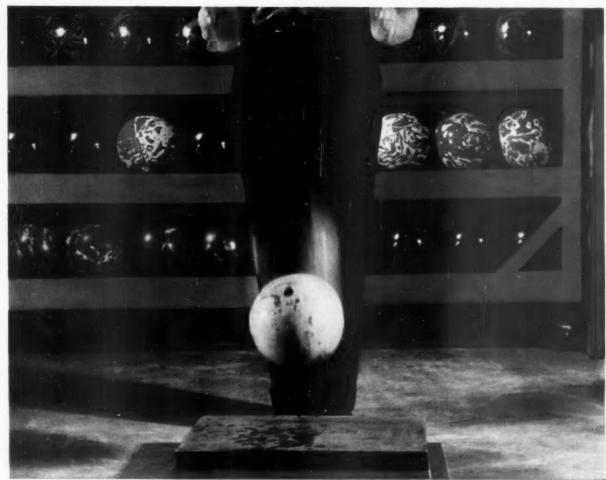


Photo courtesy The Brunswick-Balke-Collender Company, Chicago, 111.

How to prepare for a lifetime of "hard knocks"

This bowling ball—being test-bounced against a concrete-embedded steel plate—is headed for a life-time of "hard knocks." It will be hurled down hundreds of maple lanes—crash into thousands of tenpins. Yet, it must retain its perfect shape, balance and weight.

To measure up to those exacting requirements, the nation's foremost manufacturer of bowling balls used to rely entirely on natural rubber. Now, a synthetic rubber is used that actually improves the quality of the compound. And that's PLIOFLEX by Goodyear. Mixed with natural rubber and other basic ingredients, PLIOFLEX has enabled the firm to give a lifetime guarantee with every ball it makes.

It has also made possible greater processing efficiency with resultant savings in time and money. The exceptional uniformity of PLIOFLEX is a key reason for this—along with its excellent dispersion characteristics and good color stability. These qualities help make the finished product a unique combination of precision craftsmanship and incredible toughness.

If you're looking for a material that can bowl over production problems—and improve product—PLIOFLEX may be right down your alley too. For full information, plus latest *Tech Book Bulletins* on other synthetic rubbers and rubber chemicals, write Goodyear, Chemical Division, Dept. G-9415, Akron 16, Ohio.



GOODYEAR

CHEMICAL DIVISION

Plioflex -T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

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1947-49=100					170
60			1		100
50	-	~~			150
40					140
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30					130
20	*				12
10	1				111
JEMAMJJASONDJEMAMJJASO	NDJ	FMA	1959	ASON	D
1007	1953-55	V			
	Average	Year Ago	Month Ago	Week Ago	§ Late
USINESS WEEK INDEX (chart)	133.3	133.0	158.5	†157.4	*155
RODUCTION					
Steel ingot (thous, of tons)	2,032	1,546	2,486	†1,097	3
Automobiles and trucks	132,806	109,811	167,438	1158,623	164,1
Engineering const. awards (Eng. News-Rec. 4-wk. daily av. in thous.)	\$52,412	\$96,249 12,257	\$81,590	\$86,563	\$93,5
Electric power (millions of kilowatt-hours)	10,819 6,536	6,528	13,331 7,017	13,502 6,802	13,4
Bituminous coal (daily av., thous. of tons)	1,455	1,072	1,518	11,810	8
Paperboard (tons)	247,488	255,448	327,830	180,359	274,7
RADE					
Carloadings: mfrs., miscellaneous and I.c.l. (daily av., thous. of cars)	70	52	66	66	
Carloadings: all others (daily av., thous. of cars)	47	40	53	46	
Department store sales index (1947-49 = 100, not seasonally adjusted) Business failures (Dun & Bradstreet, number)	121 198	116 279	141 267	109	1
Business failures (Dun & bradstreet, number)	170	2/9	20/	237	2
RICES					
Spot commodities, daily index (Moody's, Dec. 31, 1931 = 100)	412.8	400.8	388.0	384.5	381
Industrial raw materials, daily index (BLS, 1947-49 = 100)	89.2 90.5	85.1 89.3	92.2 82.0	92.3 79.0	9:
Print cloth (spot and nearby, yd.)	19.8€	17.4∉	19.5€	19.5¢	19.
Finished steel, index (BLS, 1947-49 = 100)	143.9	181.5	186.7	186.7	18
Scrap steel composite (Iron Age, ton)	\$36.10	\$38.17	\$38.17	\$39.17	\$39.
Copper (electrolytic, delivered price, E & MJ, lb.)	32.394∉	26.480¢	31.465€	30.660¢	29.89
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	\$2.34 34.57€	\$1.85 34.90¢	\$1.92 34.47¢	\$1.94 33.84¢	\$1. 33.5
Weel teps (Boston, Ib.).	\$1.96	\$1.75	\$1.81	\$1.88	\$1.
NANCE					
500 stocks composite, price index (S&P's, 1941-43 = 10)	31.64	46.09	57.17	59.69	59.
Medium grade corporate bond yield (Baa issues, Moody's)	3.59%	4.54%	5.04%	5.09%	5.09
Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate)	2-21/8 %	11/2 %	3 1/8 %	4%	4
ANKING (Millions of Dollars)					
Demand deposits adjusted, reporting member banks	N.A.	59,735	N.A.	†60,498	61,2
Total leans and investments, reporting member banks	N.A.	N.A.	N.A.	†104,383	105,4
Commercial and agricultural loans, reporting member banks U. S. gov't guaranteed obligations held, reporting member banks	N.A.	N.A. 34,814	N.A. N.A.	†29,327 †30,966	29,4 31,5
Total federal reserve credit outstanding	26,424	26,398	27,994	28,319	28,4
ONTHIS EIGHBES OF THE WEEK		1953-55	Year	Month	Late
ONTHLY FIGURES OF THE WEEK		Average	Ago	Ago	Mon
Cost of living (U. S. Dept of Labor BLS, 1947-49 = 100)		\$114.6 101.5	\$123.7	\$124.0	\$124
Personal income (seasonally adjusted, in billions)			\$353.4	134.0 \$381.3	\$38
Farm income (seasonally adjusted, in billions)June		\$296.1 \$16.0	\$18.3	\$16.0	\$1
Domestic Air Cargo, Express and Freight (A.T.A., millions of ton miles)May		22.5	30.1	35.2	3

^{*} Preliminary, week ended July 18, 1959, † Revised,

B Date for 'Latest Week' on each series on request. N. A. Not available, Series revised, Not comparable with previous data,

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AN INTERESTING LETTER SAID...

"Why in Heaven Don't You

Speak Out on Inflation?"



I have received a number of letters from men and women who are concerned about inflation. One A. T. & T. share owner asked, "Why in heaven don't you speak out on this subject?"

The letter went on to say, "If you would alert the 1,625,000 share owners and 700,000 employees to the facts about inflation, they would help spread the news."

I warmly agree that it is essential to alert more people to the dangers of inflation and we in the Bell System are speaking up and speaking out at every opportunity.

In recent articles and bulletins to employees, the Bell System Companies have discussed the threat which inflation poses to the purchasing power of the dollar and to savings, insurance, and pensions.

At the annual meeting of A. T. & T. share owners I pointed out that inflation has been a tough problem in the telephone business. But we have not just talked about the problem—we have developed more efficient equipment and introduced many economies of operation. It is worth noting that the price of telephone service has generally gone up less since World War II than most other things.

But we know that the forces of inflation are far too widespread and powerful for any one individual or business to stem them singlehanded. This brings me to the question that I believe so many are asking. "How can I help?" In these ways, it seems to me:

By giving spoken and written support to those who are working for a strong, sound, and stable dollar.

By opposing unreasonable demands, excessive spending, and schemes that add fuel to the inflationary fire.

Your friends and associates, and especially your representatives in Congress, are entitled to your constructive views.

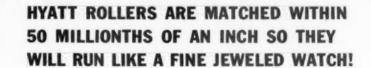
For our part, we will continue to fight inflation by pushing research hard and effecting economies in our business. And by speaking out against this threat to the people and the country.

Falagod

FREDERICK R. KAPPEL, PRESIDENT

AMERICAN TELEPHONE AND TELEGRAPH COMPANY, NEW YORK, N. Y.





Automatic electronic controls and precision testing equipment—under the watchful eyes of conscientious craftsmen—give HYATT Hy-Rolls a standard of quality never before achieved in quantity production.

For maximum performance per bearing dollar, insist on . . .

TYATTHY-ROLL BEARINGS

HYATT BEARINGS DIVISION . GENERAL MOTORS CORPORATION . HARRISON, NEW JERSEY

NO BEARINGS carry radial loads like cylindrical bearings . . . and NOBODY knows them like

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READERS REPORT

Milwaukee Rebuilding

Your article entitled Top Banks Battle Over Rebuilding Milwaukee [BW-Jul.4'59,p92] was an accurate portrayal of the problem of urban redevelopment in Milwaukee.

Perhaps one observation of mine might be added here and that is the pressure of rebuilding in the core of the city was taken off by our city policy of expansion of its limits and its policy of keeping population density down. Also our strong building and housing codes which bring down condemnable buildings has had an important effect.

I certainly hope that many Milwaukeeans read your article and are moved to support urban redevelopment. . .

FRANK P. ZEIDLER

MAYOR MILWAUKEE, WIS.

Co-op Living

Dear Sir:

Your excellent article on cooperative apartments [BW-Jun. 20'59,p88] ran out of room before you were able to develop what we might consider "the middle area" of such projects. San Francisco seems to us to be a good example of an area which, though "apartment oriented," as you suggest, has actually a limited, but definite demand for this type of housing. The demand is for highest quality, as current surveys prove, and it is limited, but it does exist.

One small dissent: the disadvantages you cite as having caused "disasters" in the 1930s have been largely offset by modern conditions, notably the changes in the tax situ-

All of these factors taken together, however, don't seem to equal the one big psychological reason why certain people prefer co-op apartments: the opportunity to live comfortably "in the heart of the city."

REX C. VALPREDA

THE COMSTOCK SAN FRANCISCO, CALIF.

Consumer Credit

Dear Sir:

Keeping Consumer Credit In Line [BW—Jun.27'59,p160] is timely and constructive comment on the current personal credit expansion binge in which banks are prominent participants. Not only



Garage and stockroom floors in Burny Bros. large, modern bakery get daily scrubbing with a Job-Fitted Combination Scrubber-Vac and Setal Cleanser

THEY'RE AN UNBEATABLE TEAM to speed the cleaning of oily, greasy floors. Here's wby: A Scrubber-Vac completely mechanizes scrubbing. It applies the cleanser, scrubs, flushes if required, and picks up (damp-dries the floor)—all in one operation! Job-fitted to specific needs, a Scrubber-Vac provides the maximum brush coverage consistent with the area and arrangement of the floors. Its teammate, Setol Cleanser, is specially designed for the greater speed of combination-machine-scrubbing...emulsifies grimy oil and grease instantaneously for fast, thorough removal by the machine's powerful vac. Moreover, Setol retains its strength longer than average alkaline cleansers. This, too, speeds the cleaning process... saves on materials... and cuts operating time of the machine, which in turn reduces labor costs.

The Scrubber-Vac shown above is Finnell's 213P, for heavy duty scrubbing of large-area floors. It's self-propelled, and has a 26-inch brush spread. Cleans up to 8,750 sq. ft. per hour (and more in some cases), depending upon condition of the floors, congestion, et cetera. (The machine can be leased or purchased.) Finnell makes a full range of sizes, and self-powered as well as electric models . . . also a full line of fast-acting cleansers. In fact, Finnell makes everything for floor care!

Find out what you would save with combination-machine-scrubbing. For demonstration, consultation, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 3807 East St., Elkhart, Ind. Branch Offices in all principal cities of the United States and Canada.



does it move the inflation spiral directly, but indirectly also in adding force to wage demand action, by promoting excessive commitments of future income.

Some banks have established a new low in the moronic level of credit promotion advertising.

A. S. HEDIGER

PALO ALTO, CALIF.

Confiscatory Taxes?

Dear Sir:

Your current issue, on the first yellow pages, Business Outlook [BW—May30'59,p19], gives a glowing account of increased income for everybody. There is going to be very much money in circulation to spend. This is good. However, if you would portray the whole story, it might make a different picture.

I am referring to the unconscionable and confiscatory income taxes that will take at least half of this money you so blithely say is being channeled into the markets....

W. C. COLMAN

PRESIDENT
MID EMPIRE CORP.
MILWAUKEE, WIS.

Tax Take

Dear Sir:

"One big Southern company calculates that an option to a man earning less than \$15,000 is more costly to the company in paperwork than it is worth to the man." See [BW—Jun.27'59,p68].

For a corporation in the 52% tax bracket, the employee and the corporation will end up with more money (or money's worth of assets) and Uncle Sam with less take if a salary payment is used instead of an option plan when the employee is in the 50% tax bracket or below; the results will depend on future events if the employee is in the 50% to 62% tax bracket; and only if the employee is in the 65% tax bracket or higher is it certain that the use of an option will result in less total taxes to Uncle Sam than would a salary payment.

Fortunately for Uncle Sam, the current accounting treatment for optioned stock conceals this situation.

R. G. CORTELYOU

OMAHA, NEB.

Letters should be addressed to Readers Report Editor, BUSINESS WEEK, 330 West 42nd Street, New York 36, N. Y.



Aerial view of 381-foot Adaminaby Dam, New South Wales, Australia—one of the world's highest earth- and rock-filled dams.

Rivers turn backward to make deserts bloom

Australia, the world's driest continent, is taking giant steps to quench its immemorial thirst. To do this will require ten large reservoirs, 80 miles of tunnels, 15 power stations and 300 miles of aqueducts—one of the largest civil engineering projects ever undertaken.

The development is intricate—but the basic scheme is simple. Large rivers rising in the Snowy Mountains once flowed downward to an already well-watered coastal plain. Now they are being dammed and turned backward to augment puny streams in the dry interior.

A key dam—the Adaminaby—has just been completed. Half a mile thick at its base, it creates a reservoir with more than eight times the water volume of Sydney Harbor. Although construction time was originally estimated at four years, the work was completed in two years. Gardner-Denver equipment—portable air compressors, "Air Trac" drills and tunnel drills—helped to bring about this happy result.

Getting jobs done ahead of time is routine performance for Gardner-Denver blast hole drills and tunnel drills. Now celebrating its 100th year, Gardner-Denver welcomes new, tough challenges with youthful enthusiasm. Gardner-Denver Company, Quincy, Ill.



Gardner-Denver "Air Trac" drills of type used on Snowy Mountains Scheme.



EQUIPMENT TODAY FOR THE CHALLENGE OF TOMORROW

GARDNER-DENVER

Products and Ideas that can pay off for you



These stories illustrate how Koppers customers are using our products to cut costs, make a better product and improve efficiency. If there is an idea here that suggests a money-saving solution to you, just return the coupon and we will send you full information on the subjects you check.



Koppers coating seals steel decks against the briny

These are railroad carfloats owned by the Baltimore & Ohio Railroad. They carry their cargo back and forth between railroad, piers in New York, New Jersey and Staten Island. Every day they are exposed to stinging corrosive salt spray and brine drippings from refrigerator cars which dot their decks with puddles.

For the past two years, the steel deck plates of these carfloats have been coated with Koppers BITUMASTIC® Protective Coatings which, in spite of the hard service, have protected the otherwise vulnerable steel decks against corrosive deterioration. This BITUMASTIC Coating is rolled on cold and dries within two hours, getting badly needed equipment back into service in a hurry.

The B&O is using BITUMASTIC Coatings on their carfloats in the harbors of New York, Philadelphia and Baltimore. These coatings from Koppers Tar Products Division are really "front line" in the constant fight against corrosion. Put them to work for you, indoors or out. Return the coupon.

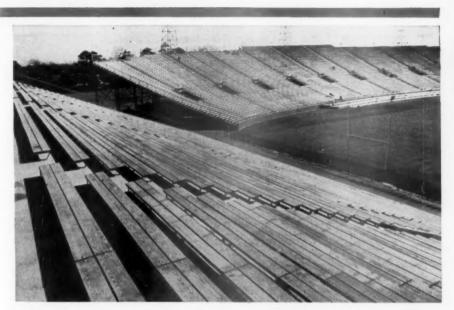




World's largest sintering machine sets production record

8,400 tons of sinter product in one day, from a single unit! A staggering production figure, but when you see the giant machine in operation, it's not hard to believe. Recently installed at the Zug Island Plant of Great Lakes Steel, a Division of National Steel Corporation, the big sintering machine is the world's uncontested champ—12 feet wide and 199½ feet long. An increase of 20 to 30% is expected in the pig iron produced by the plant's four blast furnaces, due largely to the new sintering and ore handling facilities designed and built by Koppers.

For over 50 years, Koppers has pioneered in the design and construction of coke ovens, coal-chemical recovery plants, blast furnaces, sintering plants, and many other products and services used by the steel industry. Perhaps our Engineering and Construction Division can help you set production records. Why not check the coupon?



Wolman® salts keep stadium seats looking new

This is Ladd Memorial Stadium in Mobile, Alabama. When it was built in 1949, the seating capacity was 35,786 avid, bouncing sports fans. The seats chosen to absorb the shock, plus the sun, rain, wind, rot and insect attack were yellow pine 2 x 6's, pressure-treated with WOLMAN salts — a product of Koppers Wood Preserving Division.

Now, 11 years later, more seating capacity was needed. So two more grandstand sections were built—one at either end of the field, backing up the end zones. And

what was used for seats? Wolmanized lumber, of course. Who's going to argue with the perfect performance those original seats have given for 11 years? And the new seats (in the foreground) match the old seats so well, the stadium looks brand new all over again.

WOLMANIZED lumber is clean, odorless and paintable . . . perfect for all types of wood construction. Sound like the answer to your wood deterioration problem? Then return the coupon for the full story.

This is the fourth of a series of advertisements which illustrates how Koppers products cut costs, improve efficiency, and contribute to making a better product. If you would like copies of the complete series to date for your product information file, just write us.

KOPPERS

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New container-making machine saves up to \$50,000 per year

They're standing at the control panel of a unique "cut-off" machine that slices corrugated board into sheets for the manufacture of paper boxes. In a moment the operator will punch a button and a web of paper board will flow smoothly, swiftly under the big knife, where it will be cut to exact dimensions. Production is fast, continuous, Maintenance is minimum. And the machine is so accurate that there is practically no scrap loss. Here, speed and efficiency pay off by increasing production, and eliminating scrap loss and trimming to the tune of as much as \$50,000 per year. Koppers Container Machinery Department is famous for designing and building this kind of equipment. If a similar machine can save you money, return the coupon.

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As business conditions continue to improve, the costs you cut during the recession may creep back into your

company's operations

Holding the line on costs

Here is the practical, low-cost way to full-time control

o the responsible businessman, the relation between a company's costs and a company's profits is obvious. Yet, more often than not, a company's cost program is periodic rather than continual. Influenced by economic conditions, the cost control you initiate in bad times too often fades away in the face of prosperity.

The recent recession is a case in point. Then, costcutting was the most popular subject—an economic fact of life without which your business could not survive, let alone prosper.

Yet, today, with the up-turn in full swing, there's a new and ominous possibility. As you become more preoccupied with recovery and expansion, there's the danger that uneconomic practices may return. With your eyes on the future, much of the "fat" may grow back into your operations—thereby limiting the profit to be made in the days ahead.

How to get a clear, continuous look at your costs? With the simple, low-cost management controls afforded by the new Automatic Keysort System.

Automatic Keysort is today's only data processing system that provides a family of machines and methods designed for automatic creation and processing of original records. Speeding vital day-to-day and long-range facts essential to sound management, Keysort gives you the comprehensive, on-time reports you need about job costs, labor distribution, inventory, sales and orders . . . helps you spot money-losing situations almost as they happen. Thus, because you can move at once to tighten costs, you help assure a higher proportion of profit to sales.

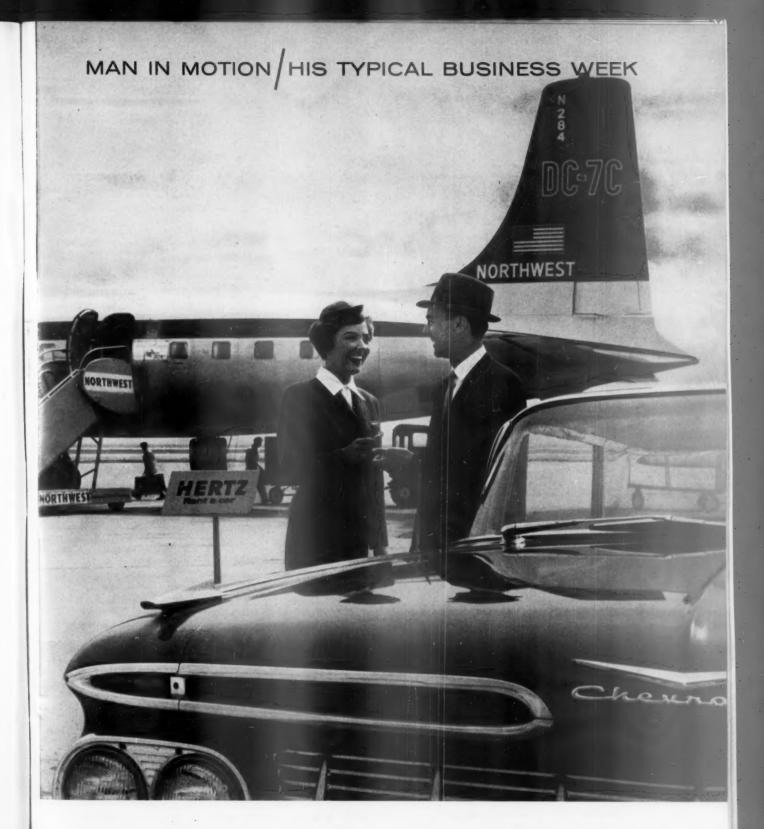
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From Royal McBee come machines that serve people first to serve business best



ROYAL McBEE · data processing division NEW CONCEPTS IN PRACTICAL OFFICE AUTOMATION



monday

Time is at a premium. It always is for the Man in Motion. And his travel habits show it. As usual, he told Hertz Rent A Car where he was going before he left. Now, refreshed and relaxed, he steps off his Northwest Imperial flight and right into his Hertz car, waiting for him on arrival. This trip, he chose a brand-new Chevrolet to help him get more done in the time he saved by flying Northwest.

NORTHWEST Orient AIRLINES/HERTZ RENT A CAR



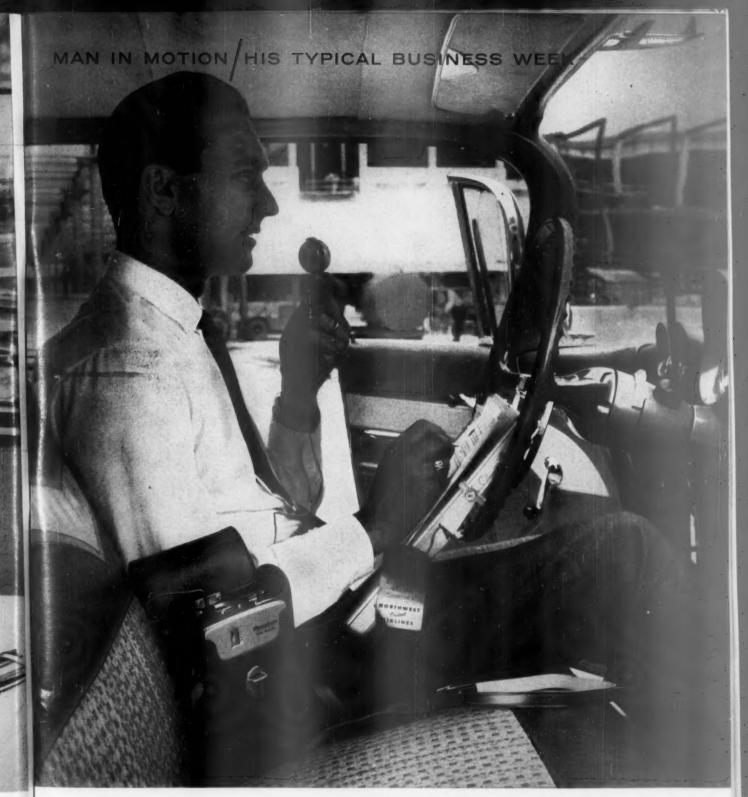
tuesday

The Man in Motion, after a good night's sleep in a modern motel, packs his Atlantic Male Bag—the unique, two-sided two-suiter, that packs easier, carries clothes in a business like way, and completely separates suits from haberdashery. His Hertz Chevrolet stands ready at his door to take him on his appointed rounds. He keeps his Northwest flight kit handy for a freshen-up during the day. Time is the Man in Motion's most precious commodity—that is why he drives Hertz, flies Northwest and packs Atlantic.

MALE BAG TWO SUITER BY ATLANTIC

W

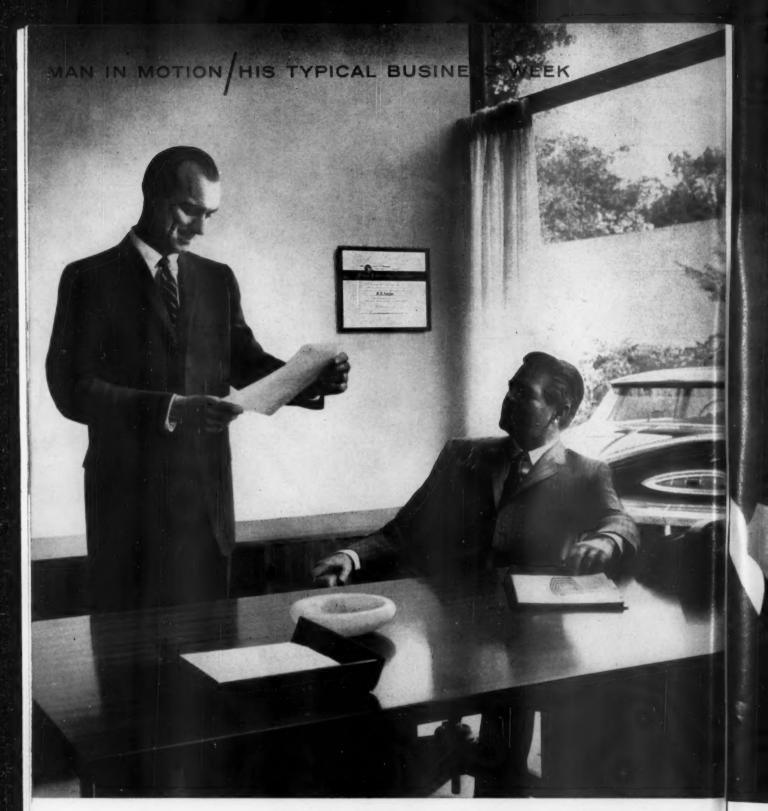
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wednesday

A few minutes in his Hertz Rent A Car between appointments—fine time to talk a report on yesterday's business, note an idea, recall expenses. All of these things are possible with the 2 lb. 11 oz. Dictet portable tape recorder. Magazine-loaded, battery-powered, it works anywhere and was used on his Northwest Orient flight for over an hour prior to landing. So easy to use, too. Just pick up the mike and talk. Note the businesslike carrying case with shoulder strap.

DICTET PORTABLE RECORDER-DICTAPHONE CORPORATION
(Dictaphone and Dictet are registered trademarks of Dictaphone Corporation)



thursday

The Man In Motion knows the importance of "First Impressions." When he's dressed right, he looks right for the job. His Botany "500" Thermostat Suit says that about him. It's 50% Dacron and 50% worsted—the perfect weight for doing business the year round. His customer is wearing a new Botany Press-Set Suit—a rich blend of Dynel and Wool, tailored in the fine Daroff tradition—it keeps its press. These Botany fabrics travel beautifully. From Northwest plane to Hertz Rent A Car to appointment, they look right, feel right, are right.

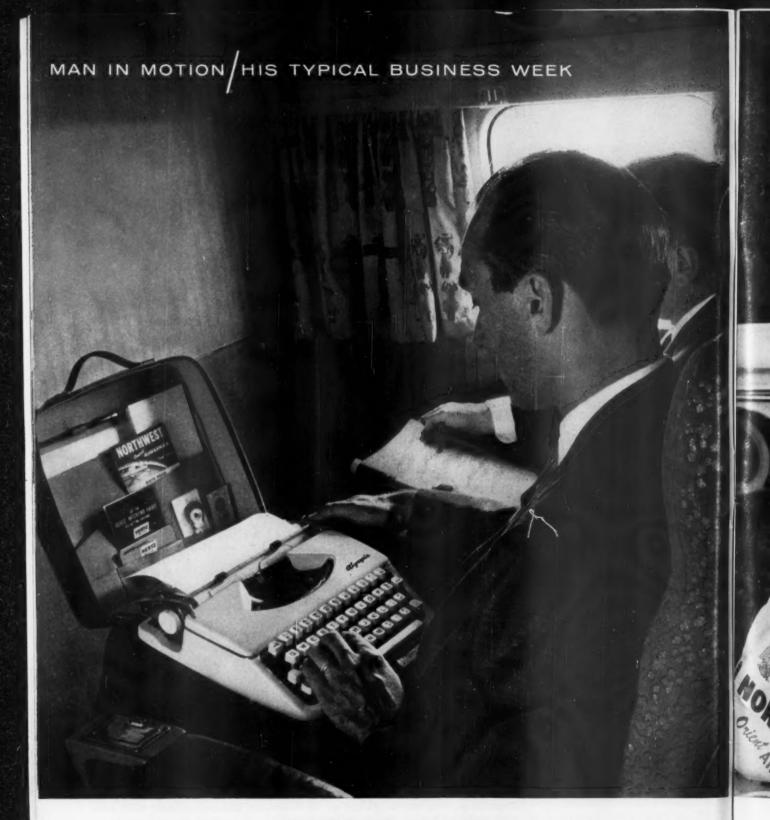
BOTANY "500" TAILORED BY DAROFF



friday

Checking in. A quick glance at his Hamilton Electric Watch tells him he's right on schedule, as he has been for important appointments all week. Amazingly accurate, the Hamilton Electric is powered by a tiny replaceable energy cell. No mainspring, no winding—on or off the wrist. And its distinctive styling marks him as a man who does things right, who knows what's best. He travels by Hertz Rent A Car and Northwest Orient Airlines and he measures the time he saves with a Hamilton Electric Watch—the world's first!

ELECTRIC WATCH BY HAMILTON



saturday

Homeward bound! End of a busy week for both the Man in Motion and his handy traveling companion... the Olympia SF Lightweight Portable. Used it daily. Finds it indispensable for typing reports and correspondence. Weighs less than 10 pounds—case and all. As smooth and easy in operation as his Northwest Imperial flight. In a minute he'll be finished—ahead lies a carefree weekend of sun and fun in a smart Chevrolet convertible he's rented from Hertz.

LIGHTWEIGHT PORTABLE BY OLYMPIA



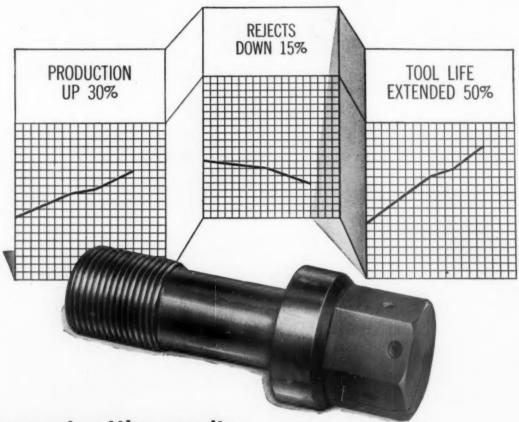
sunday

A day of rest. A day to picnic with the kids and try out that convertible he rented from Hertz. Northwest flight bags filled with dolls and swim suits went along, and he made sure the family's new <u>Safari</u> went along, too, so he wouldn't miss the ball game. The Safari is Philco's new battery operated transistor portable TV—the first television set that goes with you everywhere, plays <u>anywhere</u>. No plugging in. No picture wash-out . . . even in the brightest sunlight. Cindy says, "It's just like watching a movie screen—outdoors!"

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BUSINESS OUTLOOK

BUSINESS WEEK
JULY 25, 1959



Everything about the economy is big—even bigger, in many cases, than we have been thinking.

That is to say, new figures show us where we have been (even if the steel strike may obscure where we are going to some extent).

Our strides in the last 15 months have been amazing in many respects.

Here's a rundown on how things stood just before the steel strike:

- Total activity: The gross national product (dollar value of all goods produced and services rendered) was higher than ever before.
 - Production: Factories and mines were turning out more, in physical terms, than ever before in the country's history.
- Consumer Income: People were making more than ever before. This was not just the rich getting richer, but rather more people working than ever before and receiving more in total wages and salaries.
 - · Corporate Income: Second-quarter earnings seemed sure of a record.

All this, and very little change in prices to mar the achievement.

To be sure, the latest cost-of-living index shows a sudden half-point rise (page 115). But this was mainly due to a mid-season spurt in the cost of food—primarily fresh fruits and vegetables. This will turn around as harvests progress and meat costs go into their seasonal decline.

Gross national product in the second quarter now is estimated, on a preliminary basis, at a \$482-billion annual rate. That's up from a rate of \$470.2-billion for the first quarter (and the first quarter's figure represents an upward revision of \$3.2-billion over the last estimate).

Government economists now are figuring that gross national product for all of 1959 can average out to \$480-billion without much trouble. Earlier they had been thinking in terms of \$475-billion for this year.

Bear in mind, though, that some of this "improvement" is statistical.

About this time each year, the Washington experts review past estimates in the light of more complete production data that have come to hand. The new figures now indicate last year's estimates were on the low side, and the upward revisions are passed along into this year's figures.

Here's how it works out: Last year's GNP originally was put at \$437.7-billion; the current revision adds an even \$4-billion. Raising the benchmark puts all the 1959 figures on a proportionately higher base.

Personal income made a good showing in June, rising to a seasonally adjusted annual rate of \$382.9-billion (up \$1.6-billion from May).

For the first half of 1959, the rate averages out to \$376.4-billion, about \$23-billion above the newly revised figure for 1958's first half.

Wage-and-salary payments continue to provide by far the largest part of the rise in personal income (while government contributions through social security, unemployment compensation, and veterans' benefits are off).

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK JULY 25, 1959 In June, the estimated receipts from wages and salaries came to \$261.1-billion at an annual rate, \$1.3-billion higher than in May.

And, while it is true that unemployment rose last month, the rise was accounted for by youngsters just out of school who aren't eligible for unemployment compensation. So government "transfer payments" dipped again.

Physical production (which rose in June to 155 as measured by the Federal Reserve Board's Index) averaged 149 for the half year.

That average is better than the best months of the 1955-57 boom. And the June figure represents a climb of 23% from last year's low.

Durable goods, long the laggards, went into new high ground during May, while their June rate was 31% higher than the recession low.

Here's a comeback that has been talked about a lot in rather vague terms but still probably hasn't been given the attention it deserves:

Output of major appliances in the second quarter, judged off figures that aren't quite complete, seem to have come very close to the level reached in the same 1955 quarter and barely to have missed the early-1956 peak.

Estimates of corporate earnings have been revised downward a bit from the optimistic levels prevailing earlier (BW—Jul.18'59,p40). Yet the flood of second-quarter statements that started to hit the financial pages of the newspapers this week boasted a lot of new records.

It is unlikely, however, that the third quarter can keep up the pace.

The steel strike and the model changeover in autos will be slowing things down. And the pressures on suppliers for raw materials and parts has slackened (as you can see from copper, for example).

Gains in gross national product and personal income are bound to be at a slower rate in the third quarter. However, these massive dollar figures will show it less than the Federal Reserve's index.

Even so, the impact so far is on steel and directly related lines.

Steel users, in the main, are unlikely to feel any pinch before September. And a strike lasting that long would, in the light of postwar experience, bring another round of restocking running the rest of the year.

This year's actual rise in inventories where it means the most—in factories turning out durable goods—has been \$2-billion or 8%. Before the 1956 strike, there was a \$2½-billion buildup in six months.

But this time we started from a higher level so that total stocks, on a dollar basis, are \$800-million higher than in 1956.

Aluminum, facing contract expiration on July 31, probably isn't any more worried about customers' needs than steel. June set another new output record on a daily average basis, the sixth in the last seven months. Contents copyrighted under the general copyright on the July 25, 1859, issue—Business Week, 330 W. 42nd St., New York, N. Y.



WHAT TO DO WHEN THE WELL RUNS DRY. "Save water!" That's a cry that will be heard more and more as America's population continues to expand. When fresh water resources become overburdened, one solution to the problem, assuring an inexhaustible supply, will be water from the sea.

Feasible ways have already been devised to convert quantities of sea water into precious, potable water. All that remains is to bring these means within practical economic limits. Giant solar distillation units might do the job, and key parts of such installations would be made of stainless and alloy steels, which are extra strong, and resist weather, corrosion and heat.

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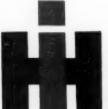


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Edging Toward Steel Intervention

Mitchell gets Eisenhower's permission to act, in effect, as chief fact-finder in steel strike.

His job: to dig behind the routine statistics for a solution to the stalemate.

It's a reversal by the President, seen as a defeat for the Cabinet conservatives who favored a hands-off policy.

The Administration took another cautious step toward direct intervention in the steel strike this week.

Labor Secy. James P. Mitchell made the move after a series of rapid-fire developments involving the White House and Republican leaders in Congress. In effect, Mitchell would end up with permission from Eisenhower to act as the chief government fact-finder and to dig behind routine statistics for anything that might end the shutdown.

 About-Face—This was something of a reversal of position for Eisenhower.
 Last week, he told reporters that the pertinent facts were already pretty well known and that no special fact-finding

effort was required.

As an explanation for Mitchell's new move, Eisenhower and Mitchell both cited an 1888 enabling act that charged the Commissioner of Labor—now the Secretary of Labor—to "investigate the causes of, and facts relating to" industrial disputes "which may tend to interfere with the welfare of the people." Mitchell is simply doing what the law requires, Eisenhower points out.

Whether actual intervention will follow depends on what happens in the next few weeks. Mitchell and Joseph Finnegan, director of the Federal Mediation & Conciliation Service, are in touch with union and management negotiators. They see no hope for a quick break in the deadlock. In fact, Mitchell made his move after getting a discouraging report from Finnegan. If the strike lasts a month or six weeks, pressure for intervention will mount rapidly.

I. Political Fortunes

More is involved than just an effort to get steelworkers back to work without a long, crippling, and bad-tempered strike. The political fortunes of a number of Republicans and Democrats may well be affected-including Mitchell's own future.

Vice-Pres. Richard M. Nixon and Mitchell head a group in the Administration who feel that the steel companies could afford to grant some wage increase—somewhere between 5¢ and 10¢ an hour has most often been mentioned—without raising prices.

Mitchell's emergence as the Administration's number one fact-finder is a considerable victory for the Nixon-Mitchell group. It did not escape notice in Washington that the key maneuvers all took place the day before Nixon left for Russia to be gone 10 days or so.

Conservatives in the Cabinet, who have argued for a rigid hands-off attitude, may find their influence lessened. Postmaster General Arthur Summerfield is the chief spokesman for this group now that former Commerce Secy. Lewis L. Strauss has left the government.

• The Situation—Here is how the situation shapes up in Washington:

A growing clamor for formal government fact-finding will be muted, at least for a time. In Washington, this was coming chiefly from Democrats, especially two Presidential hopefuls: Sen. John Kennedy of Massachusetts and Sen. Stuart Symington of Missouri.

 The impression left by last week's press conference remarks of Eisenhower, that the Administration was going to stay rigidly on the sidelines,

is wiped out.

• The Administration—or at least the Nixon-Mitchell group—is in the position of coming to McDonald's side for the second time in recent weeks. McDonald has made repeated attempts to have the government enter the picture as fact-finder, and Mitchell's move is his first success. Nixon and Mitchell also helped engineer the request by Eisenhower that negotiations be extended beyond the original July 1 strike date—another move favored by Mc-Donald.

• Mitchell's fact-finding can lead swiftly to a request by the Administration for an 80-day cooling-off period under the Taft-Hartley Act, during which steel production would be resumed. Defense needs will likely be the major factor, and one of Mitchell's jobs will be to keep track of special reports on the subject from the Commerce Dept. No pinch is in sight for several weeks at least. When and if shortages do occur, the Business & Defense Services Administration, a branch of the Commerce Dept., is already empowered to ration steel for defense purposes.

• Mitchell's emergence as the key Administration man on the strike may well advance his stature as a possible running-mate for Nixon next year. As a high official on friendly personal relations with labor leaders, and as a Catholic, his name crops up consistently as an offset to Sen. Kennedy, should Kennedy be on the Democratic ticket.

II. Mitchell's Moves

Mitchell began his series of moves Monday, conferring in the White House with Eisenhower and Raymond J. Saulnier, chairman of the Council of Economic Advisers. The plan got Eisenhower's approval that day. Tuesday morning Mitchell went back to the White House, to meet this time with Eisenhower and key Republican policymakers: House Leader Charles Halleck, Senate Leader Everett Dirksen, and Sen. Thruston B. Morton, chairman of the GOP National Committee. They gave the plan their backing.

A few hours later Mitchell summoned reporters hurriedly to his office and read a prepared statement in which he said he was going to "keep the President advised periodically as to the facts." He pointedly reminded steel management and the union that his action did not relieve them of the obligation to continue negotiating in good faith. Mitchell added that he would gather the facts with the help of Saulnier and new Secy. of Commerce Frederick H.

As word of the Mitchell coup spread

through the White House Tuesday, a debate flared over how it would be interpreted by the public. Several key officials argued that it would be taken as intervention, no matter how much the fact-finding function was stressed. Eisenhower's decision ended the argu-

"If it had looked like intervention to the boss," one aid sums up, "Jim Mitchell never would have gotten out the door with his idea."

III. Behind the Scenes

The real significance of Mitchell's role is highlighted by an unprecedented off-the-record session that Eisenhower held Monday night with a group of Washington correspondents. For dinner, he invited 16 reporters who are regularly assigned to the White House, then launched into a free-flowing discourse on a wide range of public issues.

· Self-Discipline-Eisenhower told the group that the steel strike is a test of Americans' ability to govern themselves, economically as well as politically.

If labor, business, and other groups do not practice self-discipline, he said, then someone will have to discipline them. That "someone" would be the government, moving in with controls and regimentation. To avoid this, he feels negotiators must stay on the job without government interference on either side. Eisenhower said he would invoke Taft-Hartley if the situation warrants, but he doesn't think it would do a lot of good.

· Finding Facts-Eisenhower draws a sharp line between fact-finding and intervention, but it's a line that-in practice-quickly becomes fuzzy.

The bare statistics on prices, profits, wages, inventories, and the like, as Eisenhower pointed out originally, are readily available to anyone in government. But the published figures are all industry averages. Mitchell can now ask for more detailed figures and presumably will receive them from the Commerce

• Special Information-Such information cannot be supplied solely by steel and labor negotiators alone. The industry and the union, however, will be asked to supply some special data relating to payrolls and production. How far this will go still is a question. The stress will be put on getting data quicker than is reported monthly in the regular government publications.

Mitchell has not ordered a specific study of the overriding question: How much of a wage increase-if any-can the industry grant without raising prices?

The Administration still hopes it will never have to supply the answer, though it is already embarked on the necessary preliminaries.





HUMPHREY, unavowed candidate and . . . DALY, an "unimportant" one, are causing

Showdown on

A perennial candidate-for-everything -Lar Daly, a Chicago chair jobber who campaigns in an Uncle Sam suithas succeeded in goading Congress into action on a problem that has plagued politicians and broadcasters for years. This is the legal requirement that all candidates, no matter how obscure, be given "equal time" on radio and TV.

· FCC Decision-As a self-backed candidate for the Republican nomination for mayor of Chicago (he got two votes), Daly demanded equal time when the mayor, a candidate for reelection, was shown on a TV newscast greeting the President of Argentina at the airport.

The Federal Communications Commission, in a 4-3 decision, ruled last February that Daly was entitled to equal time, not only on political broadcasts but in newscasts as well.

Since the decision, broadcasters have been fighting for a change in the law that would exempt news shows from the rule. Otherwise, they warned, the 500 or more television stations across the country would be virtually blacked out on political news. As soon as anyone became a candidate for a nomination or for office, he could not be shown or mentioned in a newscast without giving equal time to any number of "nobody" candidates.

· Prophetic Warning-A few weeks ago, one network official told a Senate committee that "it is your faces that will be blacked out of the TV screens.'

The truth of this statement was demonstrated last week when CBS canceled Sen. Hubert Humphrey's appearance on "Face the Nation" because his supporters had announced they were forming a Humphrey for President committee.

The network argued it simply could not run the risk of having to invite all candidates for the Presidential nom-

"Equal

ination to appear on "Face the Nation." • Importance of a Definition-Hum-

phrey himself claimed he was not a legally qualified candidate, and hence "equal time" did not apply to his ap-pearance. CBS stood pat on its decision, but NBC agreed and invited him to appear on its "Today" show

The different reactions of CBS and NBC are understandable since FCC's definition of a "legally qualified candidate" is extremely vague. The commission savs anvone who has qualified for a place on the ballot or has been nominated is "legally qualified"-but so also is anyone who "makes a substantial showing" that he is a candidate.

· Network Lists-Every network and station has to make its own guess as to who are qualified candidates. The criterion that the CBS legal staff used in Humphrey's case was the activity of his supporters rather than an open declaration by the senator himself. CBS concedes that applying the same standard to New York Gov. Nelson Rockefeller, California Gov. Pat Brown, Sen. John Kennedy, and perhaps Sen. Stuart Symington makes them candidates, too.

ABC has worked up a list of candidates on the basis of strong supporter announcements of entrance in a primary. Its list includes Rockefeller and Humphrey, Lar Daly, and New Jersey pig farmer Henry Krajewski. It says it will risk covering these personalities if "they do something of vital news significance.' But such coverage must secure top level clearance from the network's execs.

NBC says that it is going on the basis that any public figure will be covered according to his news value regardless of whether he is a candidate. It has broadcast shows featuring both Humphrey and Rockefeller. But NBC

has sent down a directive noting that "we're in some touchy times" and forbidding staffers to invite anyone who might conceivably be considered a candidate to appear on panel shows without specific clearance from top brass.

• Senate Group Acts-Whatever motivated CBS' ban on Humphrey, the point struck home in the Senate.

A bill to exempt "any newscast, news interview, news documentary, on-the-spot coverage of news events or panel discussion" from the "equal time" provisions on a three-year trial basis has cleared the Senate Commerce Committee unanimously. The House Commerce Committee is working on a similar bill, and passage is virtually assured.

• "Crackpot" Problem—But even with news shows exempted, serious problems remain. For one thing, Congress is making no attempt to eliminate the requirement that "crackpot" candidates be given equal time on broadcasts other than news shows, such as time donated for political speeches or guest appearances on entertainment shows.

Moreover, there is considerable misgiving about giving broadcasters too free a hand to determine what constitutes fair political coverage in the absence of any "equal time" measure.

• Rumors—The lawmakers are not seriously worried about the national networks stacking the news in a Presidential campaign. But at the local level, there is less confidence. Rep. John Moss (D-Calif.) speaks of "substantial rumors" that many small stations give a candidate a plug on a news show in exchange for a "healthy purchase" of

It's hard to determine to what extent this goes on. FCC has had few formal complaints. But this doesn't mean it hasn't happened. Candidates have resolved this problem simply by demanding equal time minute-forminute—a remedy that will not be available if current proposals become law.

• How Much Protection?—If Congress conthesport cover-

 How Much Protection?—If Congress exempts newscasts, on-the-spot coverage, and panel shows from the "equal time" law, what protection remains for a Republican or Democratic candidate for mayor who feels the local station is giving his opponent more news coverage?

The answer seems to be no real protection. The offended candidate can claim that the station, by slanting the news, is not operating in the public interest and should have its license revoked.

• The Alternative—Giving broadcasters a free hand in political coverage undoubtedly involves some risk. But most congressmen recognize that the alternative is worse. Trying to regulate news coverage by slide rule would effectively destroy radio and television as a news medium in political affairs.

Scandal Troubles Mutual Funds

Stock Exchange penalizes brokers for ties with a mutual fund. Wall Street worries about other similar arrangements. SEC may ask legislation.

A New York Stock Exchange disciplinary action shook up Wall Street this week—not because it was important in itself but because it immediately raised fears that the huge mutual fund business may be coming under a cloud.

The NYSE slapped a stiff set of penalties on the brokerage house of Model, Roland & Stone for violating a rule that forbids member firms to employ "any person in a nominal position because of the business obtained by such person."

Technically, the charge was that Model had carried two men on its payroll and had paid them commissions even though they did no actual work. Actually, Model's infraction of this ancient rule was only part of a rapidly spreading scandal that began two months ago when the Securities & Exchange Commission took the lid off the affairs of Managed Funds, an \$80-million mutual fund group (BW–May 2'59,p81).

• Charge—Managed Funds was run by two cousins, Hilton H. Slayton and Hovey E. Slayton. The SEC charges that in 1954 the Slaytons gave up managing the investments of their trust and turned the job over to Stephen M. Jaquith, an employee of Model, Roland & Stone. However, the Slaytons continued to collect fees of about \$1-million from the fund for the management job Jaquith was doing

To compensate Jaquith, SEC says, Managed Funds let Model be its broker in most of the transactions undertaken for its account. According to SEC, the brokerage house got gross commissions from Managed Funds of about \$1.7-million from 1954 to 1958.

In accordance with common Wall Street practice, the firm as a whole got half of this sum. Jaquith got about \$500,000. But the New York Stock Exchange charges that some \$300,000 went to two men that Jaquith had persuaded the firm, at the suggestion of Hilton Slayton, to take on as registered representatives—customers' men. They were Hovey Slayton's brother-in-law, Harold W. Smith, and a former business associate, James S. Stubbs.

NYSE found that these two men received commissions on the Managed Funds account, though they did no work on it. Judging this a violation of the "nominal position" rule, it suspended Jaquith, who became a general partner in the firm this year, for six months and penalized four other Model partners with \$5,000 fines.

• Parallel—This was the first major disciplinary action by the exchange since last September when it fined and suspended members of Garvin, Bantel & Co., a leading firm of money brokers, for speculation in the government bond market. Many brokers were quick to see a parallel in the two actions.

• In the Garvin, Bantel case, the NYSE was moving in on a firm that had helped generate the wave of speculation that was a prime factor in the collapse of the government bond market (BW-Sep.27'58,p45).
• In the Model case, the NYSE

• In the Model case, the NYSE was trying to deal with one aspect of a problem that plagues the mutual fund industry—the ambiguous relation between the investment trust and the broker who handles its business.

 Reciprocity—The mutual funds, of course, buy and sell through brokers, just like any other customer. But the enormous volume of their business makes them something more than just another name on the account books. Commissions on their business provide a substantial income to many brokerage houses.

Brokers, for their part, are large sellers of mutual fund shares to the public. Whether or not the brokers are pushing its shares can make a big difference in a fund's sales.

The natural result of this situation is a network of reciprocal arrangements between the funds and the Wall Street brokerage houses. Generally, they are gentlemen's agreements rather than formal arrangements. But the effect of them is to channel a mutual fund's brokerage business through the Wall Street firms in rough proportion to the amount of the fund's shares that these brokers sell.

Such arrangements are perfectly legal. And by themselves they do not do any harm to the ultimate investor, the owner of the mutual fund shares. But it is at least theoretically possible that they may put the funds under pressure to do more shifting of their portfolios than they otherwise might—so that brokers will get more commission business.

Many investment men recognize that this situation is loaded with potential conflicts of interest. But many also de-

fend it as simply a "reasonable quidpro-quo" arrangement. As one broker explains, "We are prepared to put all our services at the disposal of a mutual fund-they are active buyers and sellers and are worth the effort."

The Jaquith-Slayton agreement emphasizes the dangers inherent in this relationship. The SEC charges contain a clear implication that Managed Funds' portfolio was actively churned to provide commissions for Jaquith, Smith, and Stubbs. And from Managed Funds' own published reports it is clear that it had a turnover several times the average for other mutual

· Answer-Model has been mum about the NYSE's action, but members of the firm privately admit there was "carelessness" in dealing with the Slavtons. They say that the other partners had been willing to accept the lucrative commissions without inquiring into the circuinstances. In fact, one Model executive says that when SEC started its investigation this spring it took three weeks to locate a copy of the Slayton-Jaquith contract, which eventually was found buried in a bottom drawer of a

desk in Jaquith's home.

· Other Charges-The reciprocal agreement is the most serious charge among those SEC has brought but not the only one. The Slaytons are also charged with changing the funds' investment policy without informing shareholders. Managed Funds purported to "provide for capital growth in all classes," with emphasis on "growth rather than income." But SEC contends that constant buying and selling of shares, and the fund's quarterly distribution of capital gains indicated it was not following its own policy

· Concern-Wall Street is most concerned, however, about the future of reciprocal agreements-even ones made tacitly between friends. The NYSE's dim view of the Jaquith-Slayton agreement, which was a written one, may lead to a thorough review of the

subject.

Many in Wall Street worry about what may be disclosed. Some feel that it would be wise to regulate reciprocal agreements so that all parties would know just what they could and could not do.

As an example of the kind of pressures funds are subjected to, Edward B. Burr, executive vice-president of Lehman Bros.' One William Street Fund says that he frequently gets calls from brokers demanding more commission business in return, for producing new sales orders of the fund's shares. Says he: "We tell them where they can go."

The SEC says this is one of the most disturbing aspects of its inquiry into Managed Funds. "This is an area that we don't know very much about," says Joseph C. Woodle, director of SEC's Division of Corporate Regulation. "Eventually we may ask Congress for additional legislation to control the way reciprocal business is parcelled out. It's clear that any time a fund's investment manager decides to buy or sell for the benefit of a broker, instead of for his shareholders, he's violating his fiduciary responsibility."

• Progress-Managed Funds itself is making good progress toward reorganization. Shortly after the SEC acted, it voluntarily suspended sale of the fund's shares. Just this week, its five remaining "independent" directors-not connected with selling or managing the fund-met and designated Morris M. Townsend and his associates to take over the management and sales force. Townsend has specialized in ferreting out profitable opportunities in mutual

May16'59,p155). However, the Townsend group will remain a minority on the board of directors, which is slated for expansion from 7 to 11, and will include presidents of two St. Louis-based railroads. a local public utility, and a mining

fund management companies (BW-

Before Managed Funds' salesmen can start selling shares again, the SEC must issue its report on its inquiry into Managed Funds. In hearings to date, both the Slaytons took the Fifth Amendment, citing possible self-incrimination in refusing to testify before the SEC. According to one SEC man, this report is due "momentarily" and is likely to be a "scorcher." He adds, "I doubt that the Slavtons will ever sell securities again.

Once the report has been issued, SEC is expected to clear a new Managed Funds prospectus and proxy material, which will be sent out in soliciting stockholder approval of the new directors and of Townsend as the new investment and sales manager.

· Shock-For Managed Funds' independent directors, the Slavton affair has been a shock. At least one of them says they knew nothing of the mutual fund business when the Slavton's sudden departure threw the management of the

fund on their shoulders.

Nevertheless, they feel that the disclosures will, in the long run, be beneficial to the mutual fund industry. "For one thing," says director John Brouk, president of a St. Louis construction firm, "I think that from now on fund directors aren't going to be so willing to rubber-stamp actions of a fund's professional management. According to law," he adds, "we're supposed to act as a check on the professionals. I think the example of what happened to Managed Funds is going to make a lot of men take their directorships more seriously."

New Atom

Savannah, launched as first nuclear merchant ship, is showpiece and test vessel, but too costly to copy commercially now.

Launching of the NS Savannah, the world's first nuclear powered passengercargo ship, at Camden, N. J., this week caused considerable interest in shipping circles-but no real enthusiasm.

To commercial shippers, the Savannah is a fascinating first-of-its-kind. But from the standpoint of economy, it is a dog. Its construction and operating costs are simply too far above those of conventionally powered ships to warrant any present thought of building such

craft for commercial use.

In fairness to its owner, the Maritime Administration, and its principal builders, New York Shipbuilding Corp. and Babcock & Wilcox Co., the sleek Savannah was never intended to compete costwise with conventional vessels. First and foremost, it is a showpiece destined to tour the ports of the world as a symbol of this nation's efforts to develop peaceful uses of atomic energy. Thus, considerable money went into making its power plant virtually foolproof and its interior luxurious.

But the Savannah is more than a showpiece. Like the first large landbased power plant at Shippingport, Pa., also an extremely costly venture, it proves a lot of things that need proving. Safety and engineering feasibility are the most important of these. Again, it is a training ship for seamen for later, more economic nuclear ships.

• Costs-The hull of the vessel, built by New York Ship, and the nuclear plant, supplied by Babcock & Wilcox, cost something over \$30-million. Auxiliary equipment and services-a spare fuel charge, a servicing barge, training of crews-ran this figure to \$41-million. This is two or three times the cost of a conventional ship of similar capacity.

Precise operating costs, of course, can only be estimated at this point. But the most optimistic estimate is that it will cost at least 20% more to operate

than a conventional ship.

· Showy But Sturdy-From the shore, the 21,840-ton Savannah looks like an oversize (595 ft. long) private yacht, an appearance belied only by her three cargo cranes. Aboard, the living quarters for both passengers and crew will carry on this impression. All these will be air-conditioned and roomy. Special attractions for passengers will include a swimming pool and an observation gallery from which they can view the engine and control rooms.

Ship Will Be a Lonely Pioneer

The nuclear power plant is cushioned in concrete, steel, lead, and other shielding to prevent radiation danger to passengers and crew.

The ship has been made sturdier throughout than conventional craft as a precaution against grounding or collision. On each side of the reactor are two heavy collision bulkheads. Beyond these are heavy, continuously welded plates, then 24 in. of alternate layers of 1-in. steel and 3-in. redwood. A colliding ship would have to penetrate 17 ft. of such structure to reach the reactor containment vessel.

The many people who worked on the Savannah's design, construction, power plant, and auxiliary equipment are unanimous in saying she could have been built much cheaper.

But, as one engineer explains, the Savannah is a demonstration ship and "we had to double ordinary precautions against anything going wrong. And, after all, you want to be pretty certain that everything works before you take people on board. The smallest failure could set back severely development of nuclear propulsion."

 Navy First—There is equal unanimity that development of nuclear propulsion for commercial shipping will be painstaking. In this respect, ship builders are in the same boat with land-based power plant developers. Conventional plants are far cheaper and more efficient. Numerous technological problems still must be solved.

That's why nuclear power at sea is and will continue for some time to be largely a Navy matter. The Navy already has six atomic submarines completed, with 27 more authorized (including nine Polaris-firing subs). Under construction are a nuclear-powered cruiser, destroyer, and aircraft carrier.

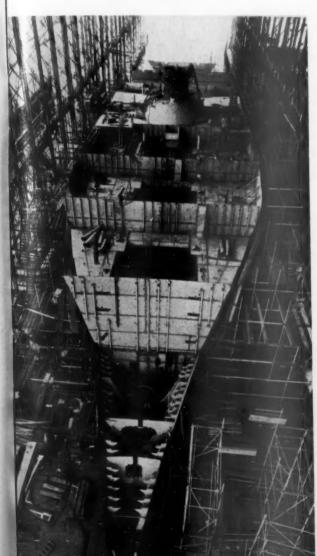
Congress is likely to O.K. the start of a second carrier this year.

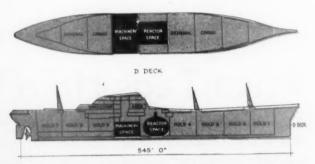
The next nuclear merchant ship is likely to be the tanker now being studied by the Maritime Administration. The government may have to build several more atomic ships before industry lays out much money.

• Commercial—Commercial interest is keen, however, because a compact nuclear propulsion plant might fairly early be economic for fast, long hauls.

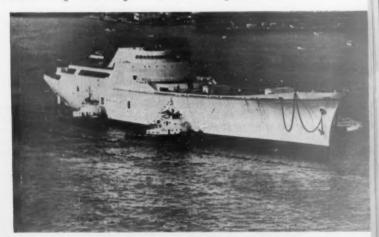
It may be that this will mean reactors of a different type from the pressurized water reactors used for the Savannah and the Navy craft. Industry people are looking keenly at the boiling water reactor, which sends steam directly to a turbine, eliminating heat exchangers. Shippers hope the government will build a ship to prove this out.

They are also interested in a reactor cooled by organic chemicals.



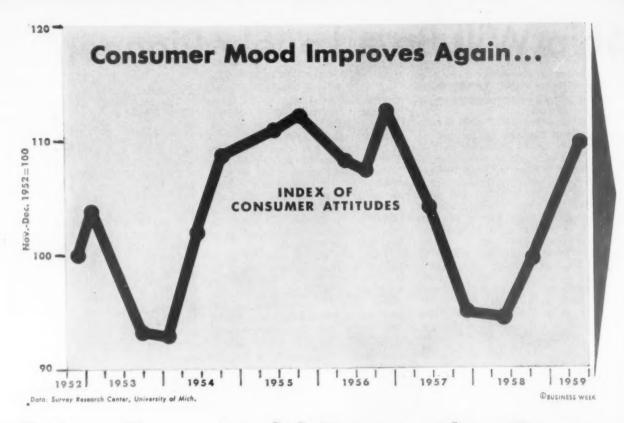


POWER PLANT, exactly amidships, will be so heavily shielded that passengers—in superstructure—will get no more than normal atmospheric radiation. Cargo hold will get more, but not dangerous amount.



IN THE WATER-It's shown in Delaware River after christening by Mrs. Eisenhower-the Savannah will be fast; cruising speed is figured at about 22 knots, but industry hears it's likely to beat this.

ON THE WAYS, ship was made sturdier than conventional craft as safeguard in case of grounding or collision. It carries 60 passengers in air-conditioned quarters, 9,400-ton cargo.



Price Tags Hold Down the Spree

Consumer attitudes indicate that for most the recession is over. Intentions-to-buy are up, with houses and used cars high on the list. But concern about rising prices may put a damper on many purchase plans.

Several things—good and bad, but mostly good—stand out in the latest survey of consumer attitudes released this week by Michigan University's Survey Research Center.

As the charts on these pages show:

 Consumers have emerged from the 1957-58 recession with a sustained expansion of confidence that first showed up last October, ending the erosion that set in as early as mid-1956.

 Far more are thinking actively about buying big-ticket goods—houses and major household appliances in

particular.

 But, as never before, consumers are showing deep concern about prices
 -especially when it comes to new cars
 -which may put a damper on their purchase plans.

 Finally, today's consumers aren't displaying the unbridled enthusiasm that marked their mood after the 1953-54 recession.

 More Realistic—A portrait assembled from the sampling of 1,500 families by the Survey Center shows the consumer today is a lot more realistic in his appraisal of (1) the economy and what to expect over the next few years, and (2) his own financial well-being.

For instance, far fewer consumers accept prosperity as an almost built-in economic condition. In 1955-56, it was widely held that good times would prevail for the next five years at least. This applied to all income levels, but it was particularly true among the presumably economically sophisticated upper-income groups—which may explain why there was a burst of capital expansion in excess of demand, since it is the upper-income levels that make such managerial decisions.

Now, apparently, the rude shock of the recession, which bit deeper than any other postwar dip, convinced a big majority that the U.S. hasn't yet found a foolproof way to level out its economic roller coaster. The Survey Center's May-June study found that only 17% of those interviewed expect uninterrupted good times for the next five years. Upper-income people are somewhat

more optimistic, with about 20% seeing unbroken good times ahead. These figures compare with a roaring 40% of all families in November-December, 1956, and 50% among higher-income groups.

 No Buying Spree—It's possible that sustained economic improvement could again change people's attitudes to the point that they again become the eager buyers who mobbed the market through much of the postwar period.

Certainly there are signs that people feel considerably better off financially because of higher incomes and less fear of unemployment than a year or so ago. But they aren't as optimistic as they were in mid-1955, and a substantial 23% still say they are worse off now than at this time last year. As a result, Survey Center researchers doubt that there will be any "early repetition of the buying spree of late 1954 and 1955." But they add:

"It appears on the basis of the June survey that in the period ahead consumers will make a contribution to the business expansion."

I. Houses and Used Cars

Nowhere should this be more true, on the basis of extensive interviews, than in the housing and used car markets. Intentions to buy these major items are exceptionally strong.

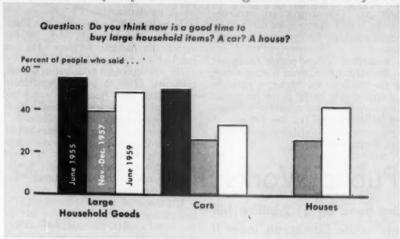
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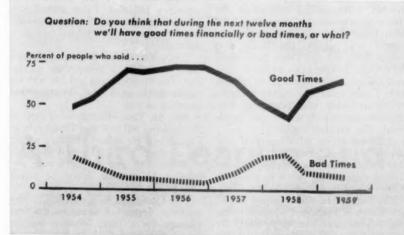
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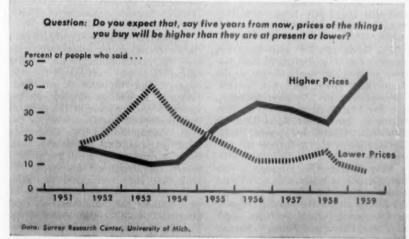
...lots more people think it's a good time to buy ...



... because more see good times ahead now ...



... but they are disturbed by ever higher prices ...



When it comes to housing, whether these intentions-to-buy will be translated into action depends on such things as mortgage terms and available financing for builders. (The Survey Center

cautions that the figure for housing intentions has a bigger margin of error than in other data.) But in any event, the survey reveals a remarkably strong and continuing backlog of demand for the residential housing industry. On the other hand, home repair-strong in

the past-isn't so bullish.

One explanation is that consumers, with bigger families and older children, are looking afield for more space. In addition, they may decide that a house is a good investment because they doubt that any sharp drop in prices is in the offing to wipe out what they view as their savings in a new home.

• Auto Paradox-Less clear-cut is the attitude toward autos. Despite the fact that the sales rate of new cars is running substantially higher than at any time in the last couple of years, consumers kept telling Michigan researchers that they were mostly in the market for used cars. Interest in new models was lower than the enthusiastic demand displayed in late 1954 and through 1955. In contrast, demand for used cars has never been higher (page 81), according to the Survey Center.

II. A Matter of Price

It isn't quite clear why the automobile paradox exists. Perhaps people are waiting for the much-touted new models, with the added compact car starters. Or the strong demand for used cars may be coming from the evergrowing number of families who are in the market for a second car.

A better explanation is the price

factor.

· Price Resistance-Today's consumers, it appears, are pretty well used to the price levels established in a burst of inflation after the 1954-55 recession. But that doesn't mean they like them. Comments the Survey Center: "More consumers than at any time since the Korean War expect prices to rise in the future, and this prospect is heartily disliked." For the past few years, this expectation of slowly rising prices has become more widespread, until today almost half the families in Michigan's sample are convinced they can expect no relief.

This is one reason why so many people feel financially worse off. Beyond that, people are concerned not so much about prices as about the expenses of living-meeting the monthly bills. In such an atmosphere, it isn't hard to see why some items-such as new cars and to some extent major household goods-don't catch the buyers' fancy as they have in the past. This is particularly true among the well-equipped, upper-income groups that don't find it necessary to replace their appliances.

· Dominant Influence-Price theory, of course, assumes that if people think prices are going up, they'll buy now. Nevertheless, during the years it has been making surveys, the Survey Center has established fairly well the fact that a period of slowly rising prices is not the time when consumers think it is favorable to buy. It may be that the conventional doctrine does apply to houses—and explains the strong demand—which people view as savings.

But cars and, to some extent appliances, are probably considered more as expenses. And people are concerned about those in relation to other demands.

Still, it may be that expressions of intentions to buy used cars later on will be translated into new car purchases once consumers see the new

models—especially the smaller Americanbuilt cars. One danger, say some observers, is that the compact cars will be priced too high for consumer anticipations.

Regardless of how people finally act in the marketplace, there is no question in the minds of the Michigan researchers that slowly rising prices have now become a dominant influence—to some extent detrimental—in the attitude of consumers when it comes to purchasing large deferrable items.

Veto Threat on Public Works

Eisenhower draws a daring bead on \$1.2-billion bill that Rep. Taber calls "pork barrel," while Democrats label it "development." He might not be overridden.

Pres. Eisenhower this week bluntly warned Congress that he may veto a \$1.2-billion appropriations bill for federal public works. By doing so, he is treading on ground that few Presidents in history have ventured on.

It is rare that a President has vetoed any appropriations measure—the product of months of painstaking work by committees of both the House and the Senate and debate in both halls as well.

It is even rarer that a President has rejected a bill that carries money for construction of hydroelectric projects, flood control dams, irrigation systems, and reservoirs. These are projects dear to a congressman's home district, and therefore dear to the congressman's heart.

• Showdown—But this week, the President, continuing his drive for a balanced budget in fiscal 1960, apparently is willing to test whether Democratic Leader Lyndon Johnson's axiom that "the veto is king" still holds. He is calling on Republicans in Congress to stop the "skyrocketing" of spending.

Eisenhower in January recommended to Congress that \$1.2-billion be appropriated for public works—for projects already under construction by the Army Corps of Engineers and the Bureau of Reclamation. But he invoked a "no new starts" policy—that there should be no money appropriated to begin construction of a new dam, or reservoir, or irrigation ditch.

Eisenhower was prompted by two

 Trimming had to be done in government programs if the budget is to be balanced.

 The relatively small amounts of money needed to get a dam or other projects started are misleading. A project that costs only \$1-million to start can run to hundreds of millions by completion date.

So the President this week wrote to

the No. 1 Republican member of the House Appropriations Committee, Rep. John Taber of New York, deploring the 70-odd new projects the House and Senate have voted. Taber had called for White House help to stop "this pork barrel" bill. Eisenhower agreed with Taber, called the money measure inflationary. He said beginning construction on projects would add \$1-billion to the Treasury's bills.

• Additions—His letter arrived on Capitol Hill as conferees from the House and Senate appropriations committees were sitting down to reconcile differences of their two chambers.

The House had added money for 32 new Corps of Engineers projects, seven new Reclamation Bureau projects. By trimming here and there, the House had not added to the President's \$1.2-billion total for public works for the year that began July 1, but it had ignored Eisenhower's "no new start" policy.

The Senate added 29 more Engineers projects, one more Bureau of Reclamation project, and one addition to the Tennessee Valley Authority system. (One project, of \$2-million to begin, was for federal development of electricity at the Trinity River Dam in California; Eisenhower wants Pacific Gas & Electric Co. to harness the falling water.)

• Veto Threat—The President's veto threat comes at a legislatively awkward moment, when he is flouting the political desires of the Democratic majority in Congress. Technically, the assignment the House and Senate conferees have is only to compromise the differences in the two versions of the legislation. Ordinarily, that would mean that the final legislation would strike a difference between the House-approved new projects and the Senate's. But Eisenhower is asking for more—unless the new starts are eliminated or cut

drastically, he threatens to reject the whole legislation.

• Veto Record—So far, when the President has threatened to veto, or has vetoed, he has got his way. He has not had a veto overridden yet.

He was successful in defeating a Congressional effort to punish Agriculture Secy. Ezra Taft Benson by removing the Rural Electrification Administration loan program from Benson's control.

He has won, so far, with his veto of a billion-dollar housing measure because of White House objections to large outlays for urban renewal grants, public housing construction, and money for college dormitories.

His threat of a veto reduced a \$175-million-a-vear outlay for federal aid to municipal airports to a mild \$63-million a year. (The President himself had recommended \$65-million a year.)

Now, the test of veto power comes against a bill that Taber calls "pork barrel," Eisenhower calls "inflationary," and Democrats call "natural resources development."

Unless Democratic leaders can bolster more loyalty to a cause than heretofore, the President can get his way on public works as he has on the other spending issues.

• Play for Time—Eisenhower's veto of the housing bill still has Democrats in a quandary. He almost certainly would be sustained by the House if the issue came to vote, and in the Senate any attempt to override would be touch

The Democrats have decided to play for time. Instead of taking up the veto message for a vote, Johnson has referred it to the Banking & Currency Committee, whose housing subcommittee—headed by Sen. John Sparkman (D-Ala.)—began an intensive set of hearings Thursday.

• Democratic Strategy—Sparkman and the Democrats on the subcommittee intend to force Administration housing officials to defend every line of the veto message. But this must be put down primarily as window dressing—an attempt to remedy some of the political damage done to the Democrats by the veto. What worries the Democrats most from a political viewpoint is that, in an attempt to get a bill past Eisenhower, they bargained away many details that they considered desirable.

Democratic strategy now is to sit tight and let the Administration stew about the possible consequences of the Federal Housing Administration's declining mortgage insurance authority, which would be replenished under a new housing act.

Then, it seems reasonable that the Democrats will try to enact another bill, considerably more costly than the new GOP proposals but still less costly than the measure the President vetoed.



A Third League and Its Chances

Wanted: One or more millionaires as angels for a multimillion-dollar business to be organized in this city.

This ad has never appeared. But just such a call went out privately this year in a dozen cities that want major league baseball. Anyone who responds must be willing to drop a wad before there's a chance of profits.

Well-heeled backers are needed to launch a new third major league in cities (map) that include New York, Houston, Minneapolis-St. Paul, Toronto, Denver, Miami, Dallas-Fort Worth, Buffalo, New Orleans, Montreal, Atlanta, San Diego, and Seattle. The league hopes to start play by 1961.

So far, only a New York group has announced official membership in the new league, but others are on the verge, notably Houston, Minneapolis-St. Paul, and Toronto.

The call for support has been answered by a mixed group of millionaires and civic leaders, including a couple of New York sportswomen, a Canadian publishing tycoon, a clubhouseful of Texas oilmen, and many another representative of local business, eager to put new cities on the big league baseball map.

"Our chief problem will be to choose the league members from among the cities that want in," says William A. Shea, wealthy New York lawyer who spearheads the expansion movement.

Third-League Theme—Today organized baseball is in the position of a businessman who finds an eager market for one out of 10 of his products but has a hard time selling the other nine. The major league teams are doing well, but the minor league teams, where most of their contracted players are, have been steadily losing customers.

There are 16 major league teams, eight in the National and eight in the American League. Both leagues have been reshuffled in recent years as owners sought to tap new, more enthusiastic markets. Many of the cities mentioned for the third league were disappointed contenders for the teams that shifted cities.

Each major league team carries a squad of 25 players during most of the season (the limit is higher in the first and last months, to give rookies a chance to perform). But, through contract clauses that amount to a perpetual option on each player's services, each team controls 200 to 500 other players in the minor leagues.

The major leagues are drawing just about as many customers as ever, but the minor leagues are meeting increasing sales resistance—chiefly, they say,

because the majors televise their games to minor league markets.

• Started in New York—The movement for another major league started in New York, which lost the Dodgers and the Giants (National League) to alluring offers of land, stadiums, and other riches in Los Angeles and San Francisco respectively. That left only one city—Chicago—with two major league clubs.

Mayor Robert Wagner appointed Shea, senior partner of the Manhattan law firm of Manning, Hollinger & Shea, to head a four-man committee to entice another National League team to New York. Even with a promise of a city-built 50,000-seat stadium at the old World's Fair site in Flushing Meadow, the group failed to budge a tranchise. So the committee decided to move for a third big league, encouraged by the disappointed smaller cities.

• Three Ingredients—The new league may include anywhere from eight to a dozen cities. Each ball club must start from scratch with three essentials:

• Working capital, estimated at a minimum of \$3-million at the start. "Financing is the least of our worries," says Shea. "All of our people are well established, and none of them look to baseball for a livelihood."

· A well situated ball park, big

enough to seat big-league crowds. City officials are, in most cases, ready to help with this problem. They're eager to put a big-league label on their cities. A Miami city commissioner puts it this way: "Miami is world-famous as a city. It has everything but a major league baseball team."

 Players who are good enough to bear out the "major league" classification. With the supply of such players limited, this is the big unanswered ques-

tion right now.

• Player Problem—The answer may come on Aug. 18, when the third-leaguers lay their plans before Baseball Commissioner Ford C. Frick and a six-man committee of present major league clubowners. The established owners control the game's top talent; unless Shea's group can arrange some way to tap these players, the third league can be regarded as doomed before it starts. Fans are unlikely to pay big-league prices to watch second-rate players, whatever their label.

Officially, the owners stand on their proclamation of last May that they would "favorably consider" the formation of a third league. But most observers think they are merely acting "correctly" for the benefit of Congress and the Justice Dept., to avert antitrust action that would knock out their

control of all players.

Major league owners show no sign of being in a generous mood concerning players. As Frick explains, "You don't see Macy's helping any new store get started across the street." Yet nothing scares the owners as much as the possibility that Congress will place baseball under antitrust laws. Without control of players through "reserve clauses" in contracts, players would be free to sell their services to the highest bidder. The richest clubs would get all the best players, destroying competition and fan interest.

Shea makes no bones of the fact that he will seek help from Congress if the club owners rebuff him. Sen. Estes Kefauver, chairman of the Senate Antitrust subcommittee, has already offered to help the third league. He has scheduled hearings on sports legislation, beginning next Tuesday. Rep. Emanuel Celler of Brooklyn, chief antitruster in the House, threatens to call in the Justice Dept. if the owners "set up any obstacles against the third league."

• City Progress—The other ingredients—money and ball parks—promise to come more easily to a third league:

In New York, backers offering \$4.5-million capital include Mrs. Charles Shipman Payson, sister of sportsman Jock Whitney; Mrs. Dorothy Killam; Dwight Davis, whose father donated the Davis Cup for tennis; George Herbert Walker, whose father put up the Walker Cup in golf; Don-

ald Grant, investment banker; William Simpson, a travel agency executive. Mayor Wagner promises a stadium at Flushing Meadow, but the team might play temporarily in the Dodgers' old

park.

In Houston, the bankroll is provided by a 35-man group dominated by oilmen. The solid gold backing is indicated by the six-man executive committee: R. E. Smith, investor, oilman, cattleman; Craig F. Cullinan, Jr., oilman; K. S. Adams, Jr., president of Ada Oil Co. and son of the chairman of Phillips Petroleum; George S. Bruce, Jr., insurance; Henry David, investor; Jack Josey, president of Josey Oil Co. Harris County, which includes Houston, has already voted a \$20-million bond issue for a new 42,000-seat stadium for a major league club.

In Toronto, the chief backer is expected to be Jack Kent Cooke, owner of the Toronto Maple Leafs in the International League. Cooke owns a magazine publishing house, controls two radio stations, and has other interests. City officials have promised to enlarge the field at the Canadian National Exhibition Grounds to accommo-

date a major league club.

In the Twin Cities, Gerald Moore, executive secretary of Minneapolis' Downtown Council, doubles as chairman of the major league committee. He says \$1.5-million is on hand, with more available. Minneapolis already has a triple-deck stadium that could easily be enlarged to seat 40,000 by 1961.

In Buffalo, a strong drive is headed by John C. Stiglmeier, chief executive of the community-owned Bisons in the International League. The city is converting the Civic Stadium to seat 40,-000 for baseball.

In Miami, the key figure is George B. Storer, millionaire owner of a radio-TV chain and owner of the Marlins in the International League. He is cautious about prospects for the third league, but city officials are enthusiastic. Plans are being made to enlarge the modern stadium to big league size.

In Denver, chances for an entry in the new league depend largely on Robert L. Howsam, who heads the local American Assn. ball club. He is a sonin-law of former Sen. Edwin C. Johnson, longtime champion of minor league ball and once president of the Western League. Denver is one of the smaller cities proposed for the new league, yet it has drawn nearly 500,000 customers in a season for minor league games.

In New Orleans, Mayor de Lesseps S. Morrison leads in the bid for a franchise. He claims full financial backing and is making plans to enlarge the local park. However, segregation against Negro players is an obstacle.

In other cities, progress has been slower. However, efforts are likely to be spurred in Dallas-Fort Worth when Houston joins the league, and in Montreal when Toronto gets close. On the other hand, interest in the third league appears low in Atlanta, San Diego, and Seattle.

Mueller Gets Strauss' Job as Commerce Secretary

In a surprise move, Pres. Eisenhower this week named Under Secy. of Commerce Frederick Henry Mueller to succeed Lewis L. Strauss, rejected by the Senate last month, as Secretary of Commerce.

Mueller, who is 65, has been serving as undersecretary since Strauss' appointment last November. He is a furniture manufacturer from Grand Rapids, Mich., who was brought to Washington as assistant secretary for domestic affairs by former Commerce Secv. Sinclair

Weeks in 1956.

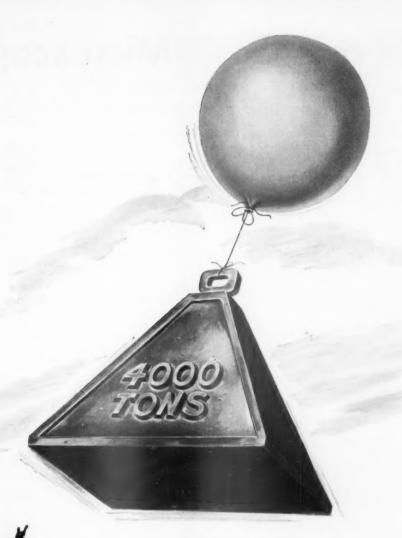
Mueller had been mentioned least among prospective successors to Strauss. His nomination, virtually certain to be confirmed by the Senate, could bring into the open a split in the department over the Administration's avowed freer trade policy. Mueller is chairman of the President's Cabinet-level Trade Policy Advisory Committee. Observers say he favors more item-by-item tariff and quota protection for domestic industries.

Mueller, for example, fought for mandatory petroleum import quotas and supported domestic heavy electrical



equipment manufacturers' unsuccessful pleas for import quota protection.

Mueller is said to be almost as strongly opposed to increased trade with the Soviet Union and her satellites as was Strauss, who made the issue a personal one.



The 4,000 tons that vanished into thin air!

Another case from the friendly Am man showing how wise it is to have low-cost protection against the high cost of crime!

For some strange reason, the plant's supplies of scrap metal kept running low-but nobody could figure out why.

As far as the superintendent knew, the truckloads of scrap brought by junk dealers were being properly weighed in. But just to play safe, he put in a "fool-proof" scale. And still there were mysterious shortages. Only after 4,000 tons, valued at over \$200,000, had been lifted was the light-fingered culprit caught. In collusion with employees of the dealers, he had been falsifying the scrap's weight by placing all of one truck and the front wheels of another on the scale at the same time.

It's this kind of crime-the unusual and unguardedagainst-that could cost your company a sizable loss of money-even bankrupt it. The low-cost way to guard against high crime losses is with American Mutual's Manufacturer's Blanket Crime Policy. Written with a large single amount of insurance across the board, it covers

every employee and location.

Let the friendly AM man-who can advise you on all your casualty insurance needs-tell you more about this policy soon. And to learn what steps to take to guard against crime in your plant, write today on your letterhead for his free booklet, "Crime Loss Control." American Mutual, Dept. BW-9, Wakefield, Mass.



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Electronics Goes Microscopic

A new way of building electronic devices has started to come out of the laboratories—molecular electronics.

It promises durable, lasting, and economical equipment—so small you can't see it.

There will be military applications in a couple of years, civilian uses by the mid-1960s.

The electronics business is on the verge of another revolution at least as sweeping as the one which began a decade ago when the transistor cut in on the vacuum tube. The revolution is coming from a new science, called molecular electronics, which is just now emerging from the laboratories.

What's involved is a technique of manipulating thin films of material into forms in which each individual molecule of the material behaves like some electronic component—like a resistor, a condensor, a vacuum tube, or whatever. With this technique it is possible to build a piece of electronic apparatus such as an amplifier or an oscillator or a switching or computing device and build it so tiny that you literally have to look through a microscope to see it at all.

Not only is a "molectronic" apparatus tiny: It is practically indestructible, it never wears out, it consumes almost no power—and it appears now that it will be competitive in cost with conventional apparatus and may even be cheaper.

· Many Searchers-The first theoretical approaches to molecular electronics began only a couple of years ago at MIT in connection with low-temperature studies. By now laboratories are deep in the subject there and at Stanford Research Institute, Ohio State, Illinois, and other universities as well as at a multitude of industrial laboratories: Westinghouse, General Electric, RCA, IBM, Bell Labs, Texas Instruments, Shockley Labs, and Varo Corp. are some of those known to be working in the field. Westinghouse has just received a \$2-million contract from the Air Force to work on development of ribbons of very pure germanium to be used as raw materials for molectronic

At midweek, General Electric was believed ready to announce at any moment a working molectronic device-probably a special rectifier (called a tunnel diode) for use in computers and satellite instruments. Upward of a dozen other such devices are nearing completion in other laboratories, and several will be made public before the

year is out. Military applications are expected to start in 1961. And molectronic devices should start to appear in such civilian products as hearing aids and miniature radios by 1965.

• Demonstrations—Typical of the sort of thing the new science produces is a demonstration circuit which can be seen at Westinghouse. It is a light-sensitive oscillator. There is a flashlight battery and a small loudspeaker. If they are simply connected together, of course, nothing happens except a click. But if they are connected through an invisible dot on a ceramic disc—the molectronic device—the speaker hums; and when the dot is exposed to a bright light, the pitch of the hum rises. A hum may not sound like much of an achievement—but just such an oscillator is the basic unit of a radio transmitter.

The raw materials for such devices, at present, are germanium and silicon. But this is mostly an accident; of the materials with the right electrical properties, the molecular properties of these two are better understood than most because of all the work that has been



INVISIBLE DOT on this ceramic disc is the molectronic equivalent of an electronic device that would need 15 components in a conventional design. It's a Westinghouse laboratory model.

done with them in the development of the transistor. As the art progresses, it should be possible to use many other materials which can be obtained in highpurity form.

• How to Do It—Commonest technique at present is first to make the needed components for a device. Manipulating with temperature, pressure vacuums, chemicals, and the like, a bit of the raw material is forced into a structure in which each molecule behaves like a tiny vacuum tube, say. Other manipulations produce a supply of resistors or condensors.

To construct a circuit a microscopic dot of resistor-molecules, perhaps, is vacuum sprayed through a mask onto an insulating surface in a layer one or two molecules thick. Then a layer of molecules with another set of characteristics is sprayed on, and step by step a whole circuit is built up. One way that components can be insulated from each other is by admitting controlled amounts of oxygen to form an oxide film in a specific pattern.

Still only a theoretical possibility is an even more startling system now being investigated at Stanford Institute. The idea is to produce a finished circuit directly from the raw materials by a process called electron-activating machining. A fine beam of electrons would be used to mold the individual molecules of a thin film in place into circuit elements and connect them with each other. The investigators still haven't licked even the problem of producing a fine-enough electron beam, but if they can do that they expect to be able to use a wider variety of raw materials-pure forms of molybdenum, aluminum oxide, tungsten, tantalum, iron, nickel, silicon di-

· Shrinking Transistors-The new art of molectronics cuts in on a development which has been under way for several years now-the subminiaturization of transistor circuits (BW-Apr. 4-'59,p130). That also is an approach to the problem of getting apparatus such as computers with thousands of components down to manageable size or of packing immense amounts of instrumentation-doubled up and tripled up for reliability-into a missile or satellite. It has made great progress, but it now looks as if it may be made obsolete before it's well started. For though subminiaturization techniques are producing components of pinhead-if not microscopic-size, they still result in equipment with little resistance to shock, extreme heat and cold, and radiation. And subminiature circuits still have soldered connections that can "It's difficult to design a reliable air filter into the engine space of today's low-silhouette cars. But our new Fram Filtronic® carburetor air filter fills the bill. This 99%+ efficient air filter with its patented built-in gasket design saves installation time and costs us less to produce—thanks to Chem-o-sol.

"Formerly we used an elaborate combination of adhesives and stamped metal rings to hold the pleated paper element. We had to fabricate the ring, fabricate a cut gasket, adhere paper to metal, and adhere gasket to ring.

"Chem-o-sol, a flowed-in compound, replaces not only the metal to paper adhesive and stamped metal . . . but by serving as a gasket between housing and filter," explains Mr. Vander Pyl, "it also eliminates the extra gasket and its adhesive. We cut both the number of materials and steps from four to one. High speed molding helped us cut our costs 35%".

Chem-o-sol offers to manufacturers in a wide range of industries the serviceability of vinyl resin in an easily-handled *liquid* form. It permits the in-place molding of vinyl compounds so that they become an integral part of the final assembly. This labor-saving advantage makes possible the manufacture of products which were economically impractical prior to the development of Chem-o-sol.

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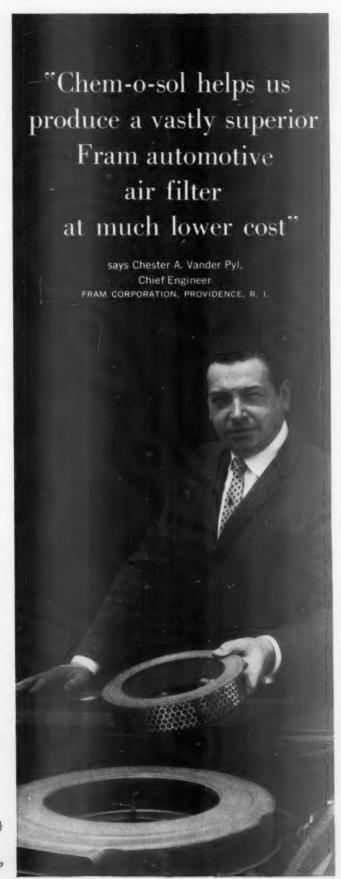






Mechanical Fasteners

Bottle Cap



In Business

Government O.K.'s Revisions in Plan For Relief of du Pont Shareholders

Tax relief for stockholders who receive shares under court antitrust orders seemed a bit more likely this week as key government witnesses before the House Ways & Means Committee supported revised legislation arising from the du Pont-General Motors case.

Earlier, both Treasury and Justice Dept. had frowned on a measure exempting du Pont stockholders from any income tax arising from the divestiture of GM stock ordered by the Supreme Court.

The revised measure, which received qualified official blessing, would have stockholders pay tax only on the average cost of the stock to the company. Thus du Pont stockholders would be taxed on \$2.10 a share instead of around \$55.

Aluminum Powder in Solid Fuels Promises Big Boost for Missile Thrust

Increases of 10%-30% in the thrust of solid fuels for missiles are now possible, Atlantic Research Corp. reports. The boost—which would vault the solids into nip-and-tuck competition with the best liquid propellents—is provided by an aluminum power which serves as a combination control when blended with conventional solid fuel ingredients.

Company engineers say the higher (30%) gains in thrust will be reached in missiles with a relatively high ratio of paylead-airframe to propellants such as most air-to-air defensive missiles. The very long-range missiles such as the ICBM Minuteman should reap the smaller harvest.

The first big missile to have its fuel spiked with aluminum powder will be the submarine-launched Polaris.

Spevack Wins Heavy Water Patent In Long Court Battle With AEC

This week, U.S. Patent 2,895,803, for an improved process of manufacturing heavy water for atomic reactors, was issued to Jerome S. Spevack, 41-year-old chemical engineer from New Rochelle, N. Y.

It was a victory for the inventor in his fight since 1957 to keep the Atomic Energy Commission from revealing the secrets of his process. He had applied originally for the patent in 1950; AEC had slapped a secrecy seal on it for seven years. Then it declassified the information and prepared to share it with friendly foreign nations. Spevack twice went all the way to the Supreme Court to prevent this.

With his patent in hand and others pending in foreign

countries, Spevack sees commercial possibilities in his process. He is trying to raise \$8-million to build a 50-ton-a-year plant, and hopes to license the process.

Today's civilian market, including exports, is estimated at 50 to 70 tons per year, at AEC's price of \$28 a lb. Another 100 tons or so goes to military uses. It all comes from AEC's Savannah River plant, which has a 450-ton annual capacity.

Spevack predicts demand will rise to 54,000 to 110,000 tons by 1985—for a maximum of \$6-billion annual sales at today's price. Many experts think he's overoptimistic.

Goodyear Starts Wave of Price Cuts On Replacement Tires; Cites Inflation

Price cutting swept the industry this week after Goodyear Tire & Rubber Co. knocked 5%-15% off its popular size replacement tires. Within a few hours, B. F. Goodrich Co. and Firestone Tire & Rubber Co. promised similar action, and other surprised competitors fell into line.

The cuts—labeled a "fight on inflation" by Goodyear—surprised some by coming at a time when industry sales are expected to hit 66.5-million for the year, 8% above record 1958. The trade sees the Goodyear move as designed to strengthen its hand when its contract talks with the United Rubber Workers begin on Aug. 18. Goodyear also hopes to make its wares more competitive with tires sold by mail order houses and small local manufacturers.

Atlantic's Cut in Crude Irks Texas

Texas officialdom yipped in anguish this week as Atlantic Refining Co. cut the price it will pay for East Texas crude oil to \$3.05 a bbl. from \$3.25. It was the first price drop in East Texas since World War II.

What pained the state government was that it depends heavily on oil taxes, and a lower price means lowered revenues. Atty. Gen. Will Wilson said he was studying whether Atlantic had violated any law in the 20¢-per-bbl. price cut, which he called "most shocking in view of the rigid curtailment of production by the Texas Railroad Commission and the industry generally."

General Electric followed up last week's price cuts on large steam turbine-generators and small mechanical-drive generating units (BW-Jul.18'59,p32) with "modifications" on medium-sized units—mostly lower ceilings on price increases permitted during the life of a sales contract.

Bank Wins Redevelopment Tax Freeze

Milwaukee's Common Council this week gave the Marine National Exchange Bank seven years of the 10-year freeze on tax assessments it sought for a downtown redevelopment project (BW-Jul.4'59,p92). The bank said it could not go ahead unless the assessment was frozen at the blighted level, as permitted by Wisconsin law. The freeze was opposed as unfair competition by the big First Wisconsin National Bank.



Machine Tool Buyers:

the man who needs

a new machine tool

is already paying for it

Beware the fallacy of the "Rate of Return on Investment" formula

Many capital goods replacement decisions are based on a formula known as "rate of return on investment".

The following example underscores the risk of management's arbitrary selection of a "desired" return.

Hypothesis

- (1) Management Objective 15% Return
- (2) Cost of New Equipment \$100,000
- (3) Savings Now \$10,000 Per Year (10%)
- (4) Projected Increase in Savings Each Year \$1,000

Decision

Postpone Replacement for 6 Years when savings of \$15,000 will be attained.

Result

Avoidable Costs Incurred: First Year — \$10,000; Then \$1,000 More Each Year — A total of \$75,000 After 6 Years.

Secondary Result

Projected Cost of Equipment in 6 Years — \$145,700. Postpone Replacement for 6 More Years. Ad Infinitum.

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WASHINGTON OUTLOOK

WASHINGTON BUREAU JULY 25, 1959



White House-Congress tensions are mounting and will put a lot of political heat into the remaining weeks of this session.

The Democratic leadership is on a spot. You don't have to look far for the reasons. Think back to January.

The Democrats at first were hot for big spending—more for defense, more for housing, aid to depressed areas, and so on.

But leaders cooled. Senate Leader Johnson and Speaker Rayburn were frequent White House guests. Their critics say that Pres. Eisenhower charmed them—sold them on the idea that if Congress boosted spending above the budget, then inflation would get out of hand.

A compromising attitude developed in Congress. The Democratic leaders backed away from earlier party positions. Spending plans were trimmed, with the expectation that Eisenhower would go along. But it isn't working out that way. He is most stubborn on money bills.

Johnson and Rayburn are hurting. They had no deal with Eisenhower. But they did feel there was a sort of understanding. Now, the leaders are catching it from both sides.

Eisenhower is using his veto power—on the Democratic housing bill (which Democrats had already trimmed), the wheat bill, and the Rural Electrification Administration bill. Veto of the housing bill was a real shocker to Johnson and Rayburn.

Democratic Chmn. Paul Butler is letting the leaders have it, too. His stand is that the Congressional leaders not only abandoned the January position of their party, but have been unable to win any compromises.

The next big test may come on public power—the Democratic bill to permit the Tennessee Valley Authority to issue bonds to finance new installations. Eisenhower doesn't like the measure because TVA's financing would be outside White House and Budget Bureau control.

But there is utility advice to Eisenhower to sign. Reason for this is that there is a provision in the bill that would "fence in" TVA. The agency's future expansion would be vertical, the utility reasoning goes, eliminating the competitive threat to neighboring systems.

Congress will vote another housing bill. There is no idea of adjourning without expanding the Federal Housing Administration's mortgage insurance authority. Many Democrats would like to hold this bill back until the closing days of the session and try again for more public housing, urban renewal, etc.

The Treasury's interest rate bill is among major legislation hanging in the balance. Democratic leaders go along with Eisenhower's proposal to remove the 41/4% interest ceiling on bonds, but want a two-year limit coupled with instructions that the Federal Reserve System shall support the bond market. Eisenhower doesn't want the amendments. The House probably will vote both, but the instructions to the Federal Reserve probably will be dropped from the final version.

WASHINGTON OUTLOOK (Continued)

WASHINGTON BUREAU JULY 25, 1959 on what is needed in the way of reform legislation, both would like to dispose of this issue now, rather than in election-year atmosphere.

The Democratic Party rupture is deep-meaningful for 1960.

Butler's outburst hurts most Democratic Presidential hopefuls. The chairman's prime intent was to deflate the Johnson candidacy, but he also damaged the other senators who see themselves as Presidential timber—Kennedy, Humphrey, Symington.

Main beneficiary is Adlai E. Stevenson, the party's twice-beaten nominee and, to date, probably the strongest 1960 contender. Alone among the top rank of contenders, Stevenson is outside the stymied 86th Congress.

Note the irony in this situation. After he won the nomination in 1956, Stevenson wanted to dismiss Butler as national chairman. He finally relented, and Butler kept his \$35,000-a-year job. But Stevenson did not allow Butler any say-so in direction of the 1956 campaign.

California's Gov. Pat Brown is another gainer.

He is in the cozy position of being on both sides in the dispute between Butler and the Congressional leaders. Brown consented to join Butler's Democratic Advisory Committee, which offers a lot of little-heeded advice to Congress. But when Butler represented this as a coup for his side, Brown—through Congressional friends—let it be known that Butler had neglected to report that the governor thinks Congress is doing all right.

What about Butler's future as Democratic chairman?

An attempt to fire him is expected in mid-September, when the Democratic National Committee meets in Washington.

Sen. Clinton P. Anderson of New Mexico has support for the job. It is being denied, but an Anderson push is under way from the center and right-wing factions of the party. One big motive: Boost Lyndon Johnson's 1960 chances and slow down the campaign of Sen. Kennedy.

Odds favor Butler's surviving until the 1960 convention. A majority of the committee has protected him in the chairmanship in the past and, as recently as last spring, against firing attempts. Butler's friends say his position may be slightly weaker now.

Butler has talked for some time about quitting immediately before or immediately after next year's convention. Now his departure at that time becomes a certainty.

Eisenhower and the press: The President has never made much of an effort to cultivate reporters. Back in 1953, when he took over, he even considered abandoning regular news conferences. He has changed. You saw this week's rash of stories about how Eisenhower feels on this and that, all very authoritative. Fact is the President invited 16 reporters regularly assigned to the White House to dinner. There was a frank discussion of domestic and foreign issues, but with the specification that the President not be quoted. It's all part of Eisenhower's efforts to do what he can to elect a GOP successor.



JACKSONVILLE'S long-cherished dreams of major civic improvements are fast becoming reality. Conceived by a forward-looking City Commission, City Council and Area Chamber of Commerce, Jacksonville's latest step forward began with a successful \$30-million municipal bond issue in 1957. On its list of capital improvements are a \$5-million, 15-story City Hall; a \$3-million, 3,800 seat Civic Auditorium; a \$3-million, 13,000 seat Sports Coliseum; a \$15-million modern-treatment sewerage system and \$6-million street and drainage improvement. Jacksonville's ambitious plan encompasses the needs of an expanding industrial city, a major seaport, a great naval station, a growing insurance center, a famed tourist attraction and a growing area-population of 440,000. OTIS has a long-standing "planner's" interest in Jacksonville's growth. Over 63% of its elevators are the world's finest. They're by OTIS.

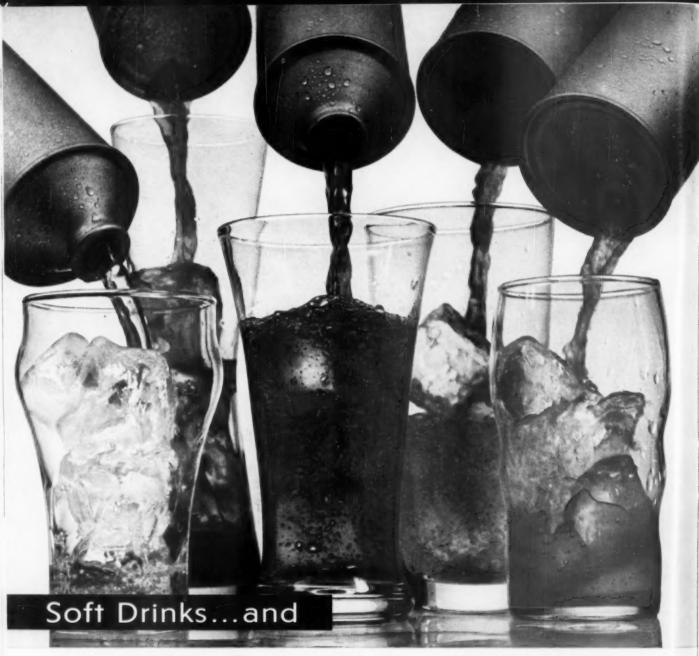


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Another New Market Lineup



WESTERN EUROPE is splitting into two trading blocks. On the one hand, there's the six-nation Common Market, which is dominated by France and West Germany and is already in operation. On the other, there's a new seven-nation free trade area under British leadership, which was given the green light at a conference in Stockholm this week.

A treaty establishing the new bloc -known as the "Little Free Trade Area" or the "Outer Seven"-still has to be written. Then, it has to be approved by the parliaments of Britain, Sweden, Norway, Denmark, Switzer-land, Austria, and Portugal. But it's almost certain that these formalities will be completed this fall, and that next July 1 the Outer Seven will launch their scheme with a hefty tariff cut between members of the group. Meanwhile, Finland may join up to make it an eightnation bloc.

• British Scheme-The Little Free Trade Area is basically a British idea. though Sweden and Switzerland have been eager partners. It is intended as a temporary substitute for the larger Free Trade Area scheme (also sponsored by Britain) the Common Market turned down last December after the French vetoed it. All the members of the new bloc hope that the new scheme will finally lead to a linking of the two

Under the original FTA plan, the Common Market nations and all other members of the Organization for European Economic Cooperation (OEEC) would have been linked from the start in a Europe-wide scheme for reducing tariffs and quotas. The British idea now is to have the Outer Seven go

ahead on their own until the Common Market will come to terms.

· French Opposition-There's no certainty that this will ever happen, of course. In Europe's capitals today, most officials expect that it will be two years before there are any serious negotiations between the Common Market and the Outer Seven, even though there may be a lot of official dickering on the question long before then.

The French still are opposed to any deal that lets the British even halfway into the Common Market. Most businessmen in West Germany and the Benelux nations would like to see a deal struck. But as long as Chancellor Adenauer continues to back Paris, Western Europe is likely to remain at "sixes and sevens," to use a British quip about the numbers in the two groups.

To be sure, Washington at some point may throw its weight behind an agreement between the two blocs. U.S. officials want to see the Common Market succeed, but not at the expense of a divided Europe. With Europe split economically, NATO would be sure to suffer. Moreover, it would set a pattern of regional trade blocs for the whole Free World to follow-something the U.S. has opposed for many years.

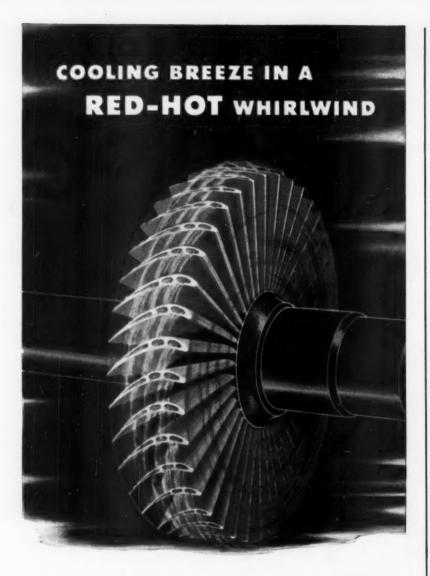
· Rules of Bloc-Whatever its ultimate goal, the Little Free Trade Area will be set up as a regional trading bloc in opposition to the Common Market. Though details hadn't been announced before this week's meeting in Stockholm, the scheme boils down to this:

· On July 1, 1960, when the Common Market makes its second 10% tariff cut, the members of the Outer Seven will grant each other a 20% cut in their tariffs on industrial goods. Other cuts will follow, paralleling the Common Market schedule, until all tariffs are removed by 1970.

• Where quotas now restrict trade in industrial goods, the quotas are to be enlarged next July 1. By 1970 all such quantitative restrictions are to be removed.

· Although there are no provisions covering agricultural products, Denmark gets special treatment in the British market, especially for its bacon. (Without this concession, the Danes would not have joined; they might even have tied up with the Common Market).

· Members are to maintain their own individual tariff rates toward outsiders, and they are free to negotiate separately with, say, the U.S. The Common Market, by contrast, is to have a common tariff, and a common negotiating position, toward outsiders. · British Gains-The British expect



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some solid trading advantages from this scheme, though not nearly so great as the ones they had hoped to get through the original FTA—and still hope to get if they can strike a bargain with the Common Market.

Within the new bloc, British exports of manufactured goods will have a tariff and quota preference over products from the Common Market. This will be especially important where there is close competition between British and German goods. Likewise, the Swedes, Swiss, and Austrians count on sales in Britain at the expense of Germany.

• Squeeze on Bonn—West Germany, in fact, will be hardest hit among the Common Market nations if no deal is made between the two groups. In 1958, West Germany exported \$2.4-billion worth of goods to the members of the Outer Seven, slightly more than to its five partners in the Common Market. By contrast, French exports were, respectively, \$608-million and \$1.1-billion.

London seems to be counting on the potential squeeze on German trade, and to a lesser extent on that of Belgium and the Netherlands, to produce final agreement with the Common Market. British officials don't think that German industrialists will sit still too long once their exports begin to suffer.

The Germans already have some gripe at the way France is taking advantage of the Common Market. As the Germans see things, the French have rigged their import quotas for cars in such a way that only a trickle of Volkswagens can get into France, while Renault is doing a thriving business in West Germany with its Dauphine. (The Germans have the same complaint about Italy.) Then there is the fact that Paris has just granted a special tax allowance to French companies buying new capital equipment—if it is bought in France.

However, there's no certainty that Adenauer will really try to pressure Paris into an agreement that would link the Common Market and the Outer Seven. Economics Minister Erhard, who favored the original FTA, has had his wings clipped since his row with Adenauer over who was to be Chancellor.

• Even Chance—U. S. officials in West-

 Even Chance—U. S. officials in Western Europe doubt there's better than a 50-50 chance that the Little Free Trade Area will achieve its avowed goal.

There are some diplomats in Bonn who argue that this has become a political issue, not an economic one. These diplomats say that before Pres. de Gaulle will come to terms with the British on trade, he will insist that France get a high political price from Washington—equality with Britain as an atomic power and as a partner with the U.S. in leading the Western alliance. This is a price that Washington may refuse to pay. **END**



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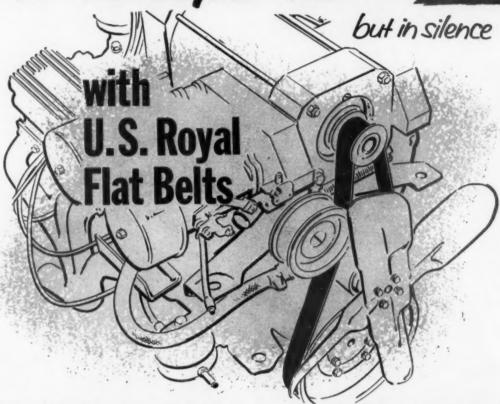
CORNING CAN DO ALMOST ANYTHING WITH GLASS





147 miles per hour...





In the 1959 NASCAR* Speed Week at Daytona Beach, cars with Latham Axial Flow Superchargers swept the field for the second straight year. Top speed for one of these cars was 147 m.p.h.

Every Latham Supercharger is equipped with a U.S. Royal 1½"-wide heavy duty drive flat belt. This is the main reason why the compressor runs so silently, so dependably. This "U.S." belt effectively handles the high-speed, high-load requirements of this drive with no stress or strain. In delivering smooth, quick power to the compressor, it easily resists destructive heat build-up. The performance of this belt on such a gruelling assignment demonstrates how effective this belt can be on tough drives on all types of machinery.

U. S. Royal Flat Belts are made with special constructions to service all types of drive conditions. They are furnished in combinations of high tensile strength, maximum flexibility, minimum stretch, oil and heat resistance, static conductivity with special covers. In most combinations the length is stable or shrinkless.

Combinations of these constructions provide a correct flat belt for every purpose—from light to heaviest duty, as well as the most abnormally severe operating conditions, such as, for example, in the Latham Supercharger.

The U.S. Royal Flat Belt offers the design engineer the assurance that here is a belt that will stand up to his most exacting design requirements, and will be equally effective as a replacement belt for existing equipment.

When you think of rubber, think of your "U. S." Distributor. He's your best on-the-spot source of technical aid, quick delivery and quality industrial rubber products.

*National Association for Stock Car Auto Racing



Mechanical Goods Division

United States Rubber

WORLD'S LARGEST MANUFACTURER OF INDUSTRIAL RUBBER PRODUCTS

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In Canada: Dominion Rubber Company, Ltd.

In Business Abroad

U.S. Balance of Payments in 1959 Heads for \$4.5-Billion Deficit

The U.S. is going heavily into the red in 1959 with its international payments—to the tune of \$4.5-billion, against \$3.4-billion in 1958. That's the midyear estimate of a group of foreign trade specialists (the balance of payments group) at the National Foreign Trade Council.

The NFTC calculations—based on the first half of the year (BW-Jul.18'59,p89)—come out this way:

Exports: \$15.9-billion for commercial shipments, or down \$300-million from last year's rather poor showing. Imports: \$15-billion, or an increase of \$1.8-billion over

1958 and an all-time high.

Total Goods and Services: Balanced at \$23.1-billion. Over-all Deficit: \$4.5-billion, after allowing for government aid and loans abroad, plus the outflow of

U.S. private capital.

GM's \$20-Million Argentina Program Includes First Manufacturing Plant

In his first big move as boss of General Motors Overseas Operations Div. (BW-Jul.11'59,p45), Elis S. Hoglund has announced a GM plan to invest \$20-million

in Argentina.

ell

Hoglund put the proposition up to Argentine Pres. Frondizi last week during a visit to Buenos Aires. The GM vice-president indicated that most of the new money would go for a plant to manufacture Chevrolet and Bedford trucks. (The Bedford line of trucks is produced in Britain by Vauxhall.) The new plant in Argentina would be in addition to two GM assembly operations there, plus a recent joint venture with West Germany's BMW.

With its latest move, GM has become the third U.S. company to enlarge its automotive operations in Argentina. The other two are Ford and Kaiser. All three will have stiff competition from the local operations of German, French, Italian, and British producers.

Japan to Ease Its Regulations On Foreign Capital, Licensing

The Kishi government soon will loosen up its regulations governing investment of foreign capital in Japan and licensing arrangements with foreign companies. The move will open the way for a new spurt in U.S.-Japanese business deals

Since 1956-57, when the investment boom drained Japan's foreign exchange reserves, the Finance Ministry and the Bank of Japan have turned down most proposals for licensing agreements with U.S. and other foreign companies. In addition, the government—and

Japanese businessmen-have discouraged foreign investment in local industry.

Now the country's exchange reserves are at a postwar peak. So the government is ready to shift its policy. At the same time, Japanese industry wants action on some 200 pending applications for licensing agreements. Business also seems more interested than before in having U.S. companies invest in Japanese industry.

North Carolina Junketeers to Woo Investment Capital in West Europe

North Carolina soon will make a bid to attract investment capital from Western Europe. The State Board of Conservation & Development figures that it can offer attractive investment opportunities for European industry, just as the European nations now offer openings to American companies.

To make their case, members of the C&D Board and the State Ports Authority are planning a junket to Europe this fall. It is expected that Gov. Luther Hodges will join the group. In the past he has gone with C&D officials to New York, Chicago, and Philadelphia in search of new industries for North Carolina.

Du Pont, Mexican Bank Join Up To Produce and Market Chemical

Du Pont has gone into a joint venture in Mexico. The giant of the American chemical industry has combined with local interests to form a new company to manufacture and sell titanium dioxide for the Mexican pigment market. The plant is now under construction in Tampico, a seaport on the Gulf of Mexico.

A Mexican bank, Banco de Commercio, S.A., holds the controlling interest in the new company. This makes it an unusual foreign venture for du Pont, which normally operates abroad through wholly owned subsidiaries such as two other operations it now has in Mexico.

Business Abroad Briefs

Gen. Maxwell D. Taylor, former Chief of Staff of the U.S. Army, takes over Sept. 30 as chairman and chief executive officer of Mexican Light & Power Co. Taylor succeeds William H. Draper, Jr., as head of Mexico's largest private enterprise. The company supplies about 40% of Mexico's electric power and serves some 700,000 customers.

British auto producers are expanding their overseas operations. In Naples, the Standard Motor Co.'s newly formed Italian subsidiary will soon be assembling the new Standard Herald in addition to the Triumph TR3. In Australia, British Motors Corp. has just started production of the Morris Major (Series 2) in its \$38-million manufacturing plant at Sydney. BMC's new "all-Australian" car will provide added competition for the General Motors' Holden.

FROM NOW ON, THE U.S. MARKET IS 5 HOURS WIDE AND 2 HOURS DEEP.

New American in distribution:



JETfreight expedites all the way...plus these 4 AIRfreight advantages across the U.S.

- Widest coverage. American offers direct onecarrier service to more leading markets than any other airline.
- 2. Highest frequency. Greater number of U.S. departures—over 1,000 daily—mean fast forwarding and minimum terminal time.
- 3. Greatest dependability. Largest, most experienced personnel force and finest facilities assure careful, prompt handling.
- 4. Space assured. American's largest U.S. fleet means ample space for your shipment when and where you need it.

AMERICAN AIRLINES =AIRfreight
The Jet Airline



revolution American Airlines

TETfreight

American — first with airfreight — now offers you the first shipping service jet-paced all the way. Most jets across the United States. Ground handling geared to jets, too. No extra charge over airfreight rates.

JETfreight is ready—right now—to revolutionize the movement of your goods. To minimize inventory costs. To market products with jet-fast speed, jet-fresh immediacy. To carry these products to new market areas. To lift your profits to new levels.

For JETfreight expedites your shipments all the way. In the air, American's 707 Jet Flagships quicken them to almost twice the speed, bring one coast within 5 hours of the other. And American flies the most nonstop daily jet trips both East and West.

On the ground, JETfreight's special pickup and handling mean shipments often arrive the same day. And heavy-volume shippers please note: With the 707's huge doors and carrying capacity, you can ship larger items and *more* of them than ever before.

All this at no premium over airfreight rates. Just call your nearest American AIRfreight representative. Ask for an American Airlines pick-up truck. Or write Mr. S. C. Dunlap, Vice President-Cargo, American Airlines, 100 Park Avenue, New York 17, N. Y.

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REGIONS

BUT HE WORKS FOR YOU Connecticut Paces New

MEASURE	OF	PERS -Millions of	ONA	LIN	OME
,			asonally Adjus		
	1953-55	MAY	APRIL	MAY	% CHANGE
STATE	AVERAGE	1958	1959	1959	VS. YR. AGO
Alabama	\$286.4	\$354.8	\$389.5	\$386.9	+ 9.0%
Alaska	41.9	49.3	55.9	56.4	+14.4
Arizona	126.9	181.0	198.3	205.7	+13.6
Arkansas	153.5	180.6	193.7	196.6	+ 8.9
California	2,341.7	2,989.2	3,322.3	3,328.4	+11.3
Colorado	217.2	286.5	319.2	318.3	+11.1
Connecticut	440.7	520.1	566.1	566.9	+ 9.0
Delaware District of Columbia	78.6	98.6	110.5	111.6	+13.2
	158.2 456.8	179.0	192.5	191.6	+ 7.0
Florida	-	655.2	722.0	739.7	+12.9
Georgia	383.2	450.6	493.1	498.8	+10.7
Hawaii	76.0	92.6	105.3	104.3	+12.6
Illinois	74.5	95.0	99.1	98.4	+ 3.6
Indiana	663.5	1,905.3 721.6	2,136.6 839.0	2,169.8 842.5	+13.9
	2				+16.8
lowa	357.3	455.8	478.0	476.8	+ 4.6
Kentucky	281.8	329.9 345.5	359.8	352.9	+ 7.0
Louisiana	307.1	420.2	367.0	367.4	+ 6.3
Maine	112.8	130.8	435.0 134.3	439.1 137.1	+ 4.5
					-
Maryland	432.3 799.8	520.4	572.3	572.7	+10.0
Michigan	1,234.1	932.1	1,010.1	1,015.6	+ 9.0
Minnesota	434.8	1,297.7 524.7	564.8	1,511.6	+16.5
Mississippi	160.9	206.2	207.9	214.6	+ 8.0
Missouri	600.9				-
Montana	92.3	687.2 113.7	746.5 121.4	749.0	+ 9.0
Nebraska	182.5	237.7	251.8	117.8 247.2	+ 3.6
Nevoda	43.1	54.1	62.2	61.8	+14.2
New Hampshire	75.2	85.4	95.6	95.9	+12.3
New Jersey	982.9	1,150.7	1,238.0	1,261.4	+ 9.6
New Mexico	91.8	119.7	126.6	129.5	+ 8.2
New York	2,887.9	3,383.9	3,566.3	3,581.0	+ 5.8
North Carolina	429.0	508.8	562.4	565.3	+11.1
North Dakota	67.4	82.2	86.5	84.8	+ 3.2
Ohio	1,476.3	1,618.2	1,862.6	1,879.9	+16.2
Oklahoma	268.5	317.5	331.1	333.1	+ 4.9
Oregon	249.8	286.7	316.5	318.5	+11.1
Pennsylvania	1,678.6	1,854.0	2,021.8	2,655.5	+10.9
Rhode Island	129.9	141.2	153.0	154.7	+ 9.6
South Carolina	210.0	231.8	255.8	257.9	+11.3
South Dakota	73.7	99.0	104.1	103.8	+ 4.8
Tennessee	345.9	405.0	446.0	446.1	+10.1
Texas	1,132.9	1,394.6	1,448.8	1,456.1	+ 4.4
Utah	98.1	121.6	137.8	140.0	+15.1
Vermont	45.9	51.3	56.5	56.8	+10.7
Virginia	383.3	529.7	561.0	563,4	+ 6.4
Washington	418.0	490.9	530.1	327-6	+ 7.5
West Virginia	209.7	245.1	270.7	270.4	+10.3
Wisconsin	528.2	611.3	657.2	669,7	+ 9.6
Wyoming	45.9	56.6	58.9	50.7	+ 3.7
WTINGA - IN	N-3415	3.28,800.5	(2) (11) (1-		9.2%
May figures preliminary;	April revised	l.	-		COULTHEST WEEK

England's Economy

Big Year-to-Year Gain Despite Farm Decline

As industry continued to flex economic muscles to demonstrate the strength of its recovery from last year's short-lived recession, U. S. pocket-books kept on reflecting the improvement. Despite occasional signs of flattening out in some states, May incomes gained 9.9% over the year-ago level, according to BUSINESS WEEK'S Measure of Personal Income. This was the biggest yearly improvement since the depth of the slump.

Twenty-three states topped the national average. The better-than-seasonal pickup in construction, services, and retail trade employment in many areas helped offset the decline in farm income caused by falling crop and livestock prices. In 33 states, May cash receipts from farm marketings were lower than

the same month last year.

• High Scorer-Star performer among the states was Indiana. Hoosiers registered an impressive 16.8% year-to-year gain. Hardgoods industries led the recovery here with more than 32% additional jobs in transportation equipment, a 20% rise in primary metals, 14% in electrical machinery, and 11% in non-electrical machinery. A prolonged steel strike would seriously affect the income picture in this state, which is the third-largest steel producer, as well as in the other 28 steelmaking states.

New York is emerging from the recession like a sleepy giant. While nonfarm employment was up almost 64,000 from May, 1958, this was a relatively small gain in the state with the largest labor force. Factory jobs were 47,600 higher than a year ago—almost three-fourths of the improvement. But certain segments of the durable goods manufacturing industries registered fewer employees than in May of last year: non-electrical machinery, down 3,900; transportation equipment, down 2,800. Food and kindred products dropped 3,100 jobs. And communications employment fell 5,800.

• Monthly Comparison—From April to May, incomes across the nation increased 0.8%. Seventeen states, mostly in farming areas, registered a loss from the previous month. California showed up among the month-to-month losers for the first time in 13 months, mainly because of the decline in farm income. On the plus side, Mississippi led the pack with a 3.2% gain over April.

Although New England for years has lagged behind the rest of the nation in economic growth, the area contains one state—Connecticut—that has kept pace with the country as a whole. Today, as in past years, personal income in Connecticut continues to expand at practically the national rate (see chart on page 52). And the pickup in capital spending across the nation is providing a nice stimulant to the state's important machine tool industry, assuring an even rosier economic outlook.

• Favorable Factors—Several factors account for Connecticut's position:

 It is the nation's most industrialized state, having the largest percentage of non-agricultural workers employed in manufacturing.

 Almost three-quarters of its manufacturing employees work with metal or its products, earning high wages.

 While Connecticut depends heavily—though not excessively—on large defense contractors, these have been relatively stable or have expanded.

 The southwestern part of the state is considered part of New York City's metropolitan area, housing thousands who commute to well-paving jobs in Manhattan. A number of New Yorkoriented businesses also are based there. · Recession's Impact-Although Connecticut felt the recession, it got off more lightly than some of the other highly industrialized states. Employment dropped substantially in machinery, aircraft, primary and fabricated metals, and electrical equipment. But, these industries continued to employ many people. And non-manufacturing fields such as insurance, a key employer in Hartford, provided a stabilizing influ-

Like the rest of the nation, Connecticut is making a good recovery from the recession.

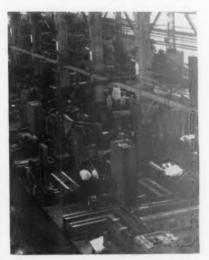
And the situation is bound to keep on improving. Tool manufacturers are just beginning to get orders from industries that are now more confident about the business outlook. The tool makers have begun rehiring.

• No. 1 Employer—The largest employer in Connecticut, with over 55,000 workers, is United Aircraft. Its layoffs were not drastic.

Although largely tied to one areaair and space-and one customer-the federal government-United Aircraft determinedly diversified as much as possible within its field. Its main division, Pratt & Whitney, is doing well supplying jet engines for both military and commercial aircraft. As propeller sales



DEFENSE is big business in Connecticut, Electric Boat works overtime on subs.



MACHINE TOOLS are key industry, too. Bullard Co. is rehiring laid-off men.



BRASS plants such as Chase, depressed longer, now are picking up.



Eastman 910 Adhesive solves another production bottleneck

Recordak Corporation, New York City, offers microfilming equipment that photographs and endorses bank checks in one operation.

Rubber endorsing plates, rather than steel, were preferred yet could not be used because of the difficulty of securing the flexible rubber plate to the steel back, permanently and quickly.

The problem was solved with East-

man 910 Adhesive.

Coated lightly with adhesive, the plates are held in alignment in a simple jig. In a matter of minutes, the bond is formed... and the unit is ready for delivery and installation. Field tests show the bond lasts for the life of the rubber printing plate.

Eastman 910 Adhesive is making possible faster, more economical assembly-line operations and new design approaches for many products. It is ideal where extreme speed of setting is important, or where design requirements involve joining small surfaces, complex mechanical fasteners or heatsensitive elements.

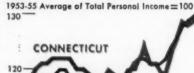
Eastman 910 Adhesive is simple to use. No mixing, heat or pressure is required. Upon spreading into a thin film between two surfaces, setting begins immediately. With most materials, strong bonds are made in minutes.

What production or design problem can this unique adhesive solve for you?



For a trial quantity (1/3-ounce) send five dollars to Armstrong Cork Company, Industrial Adhesives Division, 9107 Indian Road, Lancaster, Pa., or to Eastman Chemical Products, Inc., Chemicals Division, Dept. B-7, Kingsport, Tenn.





UNITED STATES

110-



of Hamilton Standard started to decline, the division went into turbine and missile equipment. The Sikorsky Aircraft division has been moving from pistonpowered helicopters to turbine-powered ones. And United itself has gone farther afield in rockets, nuclear reactors, chemical propellants.

• Uninterrupted Gains—General Dynamics' Electric Boat Div., on the other hand, never felt the recession at all and has been growing steadily. With a record number of submarines under way, employment at its Groton shipyard has hit a peak of 10,700. And unlike United Aircraft, which largely has been following the hold-down-the-overtime edict of the Pentagon, Electric Boat has about half of its people working a six-day week.

The machine tool business, by contrast, has a long way to go before regaining its pre-recession levels—even considering the greater productivity that has been attained.

The Bullard Co., for example, had 1,000 men working a 32-hour week last fall—compared to 3,000 working 40 or more hours in the spring of 1957. Now Bullard is back on the 40-hour week; its work force is up to 1,300. Pratt & Whitney Co. (no kin to Pratt & Whitney Aircraft) began to rehire in March, after its machine and cutting tool employment sank to 25% of its pre-recession level.

• Pickup in Brass-In the Naugatuckor Brass-Valley, the brass mills have begun to rehire, too. They have been in a longer recession of their own. After an excellent year in 1955, they were hit by floods. Since then, they have been losing ground to brass mills closer to the nation's growth areas and to imports. Chase Brass & Copper Co., a Kennecott Copper subsidiary, closed down one Waterbury plant entirely.

A much brighter picture is represented by the ball bearing industry, whose output makes up about half the nation's. Fafnir Bearing Co., the largest independent bearing maker, has 5,100 workers, more than its pre-recession level.

Geographically, the upsurge in economic activity has been widespread.

• Sore Spots—Only two major areas had unemployment of more than 6% last month. New Britain was down to 7.6% from 14.4% a year ago, thanks to rehiring in ball bearings, machinery, and hardware. Unemployment in Bridgeport dropped to 7.8% from 13% as machine tool makers and other metal plants began to rehire.

In two other areas unemployment fell below 6%. Waterbury, which had 13.9% of its workers unemployed a year ago and 5.6% last month, has benefited from rehiring at the brass mills and at U. S. Rubber's Naugatuck Chemical Div. In New Haven, where manufacturing is relatively less important, re-

hiring has been general.

• Construction Activity—Around Hartford, where state government, insurance, and United Aircraft contribute the major segments of employment, commercial construction has been bustling. There has been a lot of activity in office and warehouse buildings. Downtown, the dominant G. Fox & Co. department store has built a parking garage and begun a \$7.5-million addition to the store. To counter its moves, E. J. Korvette, the discount house across Main Street from Fox, last week announced it also would build a garage.

Connecticut's recovery has proceeded so well, in fact, that labor actually has become tight in spots such as New London, Danbury, and Stamford. Skilled workers are generally hard to find.

• Danbury Revives—Danbury, which once incrited the title of hat capital, has a hat employment one third of what it used to be. But the area is a beehive of new plants. Danbury is getting the overflow from Stamford in companies that want to be near New York but can't get land zoned for industry.

One of the main attractions the Stamford-Norwalk-Danbury area has for outside companies is the fact that their men can have fairly easy access to New York for advanced study.

• Shortcoming—It is a common complaint among Connecticut businessmen that the state is short of the kind of school facilities that would enable their people to take advanced courses—say, in science or engineering. Some efforts are being made to make up the gap. END

Salesman who "never uses" the railroads



The highways he travels . . .

The car he drives . . .

The products he sells for his company (and that he'll later have shipped to his customers) . . .

All come by low-cost railroad transportation — as raw materials, component parts, finished products. There's railroad service in every item in his line.

Salesman who "never uses" the railroads? There's never a day when he doesn't!

Railroads carry more of the things you use than any other form of transportation. And they save you money, too, because railroads are a *low-cost* way of shipping freight.

That's why financially sound, progressive and strong railroads are important to you. They are essential both to an expanding economy and to the national defense. It's in your interest that railroads be given the equality of treatment and opportunity on which their health depends — now and in the future.

ASSOCIATION OF

AMERICAN RAILROADS

WASHINGTON 6, D. C.

How McGraw-Hill Circulation



Advertisers today are asking for more and more evidence on which to base their media decisions. This is a healthy attitude that we heartily encourage.

One subject on which we are often queried is circulation. From time to time, therefore, I believe it is helpful for us to restate and re-emphasize McGraw-Hill's basic circulation philosophy.

I am consequently using this method of frankly answering some questions that have been asked by agencies and advertisers.

Welson L. Bond

PRESIDENT, PUBLICATIONS DIVISION

Why does McGraw-Hill believe so strongly in paid circulation?

Fundamentally, because payment for a product represents the normal and natural way of doing business. Agencies sell their services, advertisers sell their products. The general magazines and newspapers of this country are sold, to subscribers or on newsstands. We're no different from these agencies, advertisers and other media. We simply share their belief in the cardinal rule, "If something has value it can be sold."

2

Does paid circulation guarantee readership?

No. Payment for a subscription, however, certainly indicates an intent to read. The subscriber expresses this intent in the simplest and most universally recognized form-money. Having expressed it, he retains full freedom of choice. If he doesn't read the publication, he won't continue to pay for it.

Further evidence of readership of a publication by its paid subscribers is contained in a recent Laboratory of Advertising Performance study. (Laboratory of Advertising Performance Sheet 1195 will be sent on request.)

Can paid circulation really provide "100% market coverage"?

No, especially if you interpret coverage as readership, not just receivership. We recognize that there are in every market a certain number of people who do not and will not read any publication; you can lead them to water but you can't make them drink. Nobody is going to get their attention as readers.

There is another group of people who can be reached only by McGraw-Hill's type of vigorous, persistent circulation selling activity. By direct mail, our own field salesmen, and by issue cards, we uncover many of the "hidden buying influences" who are important to market coverage, but who are not listed in directories or registration rosters.

McGraw-Hill publications provide representative, selective circulation in the markets they serve. Both the quantity and the quality of the subscribers are identified by actual audit of paid transactions. This provides the advertiser with documented answers to two basic questions about the audience he is buying: "Who are these people?" "How many of them?"

Does paid circulation guarantee "editorial quality"?

In our view, "editorial quality" is measured directly by the publication's usefulness to the reader. If the editorial content does not match his job interests, serve his needs, help solve his problems and compel his continuing attention, it is not of real use.

If it isn't useful, he will neither buy the publication nor read it.

Paid circulation means that we have accepted the challenge of placing our editorial services on the block. We have given every reader the option of deciding on the value of this editorial service to him. He casts his ballot, for or against, when he first subscribes and every time he comes up for renewal.

Editorial quality, or usefulness to the reader, thus is judged, not on a theoretical basis, but on the hard fact of a "sale" or "no-sale" decision by the publication's audience.

Policies Benefit Advertisers

5.

Doesn't it cost more to sell subscriptions than to give them away?

It is possible that, on some publications, selling costs may temporarily exceed subscription income. Usually this is because of circulation growth factors involved in the sale of new subscriptions. However, the economics of paid circulation are not based on selling new subscriptions only, but on the lower cost of renewals as well.

For example, over the last ten years, McGraw-Hill publications have collected more than \$42,700,000 in subscription fees. The total of all expenses involved in the procurement (sales and collection) of these subscriptions amounted to just over \$34,700,000. This gave us a subscription sales margin of about \$8,000,000, plus the valuable privilege of mailing under second class postage rates. The subscriber, therefore, has shared in the costs of our publishing operation.

6.

Doesn't paid circulation mean that you have to accept all subscriptions regardless of quality?

Not at all. Subscriptions are solicited and accepted only from people who meet the circulation *specifications* set by each publication. These standards are clearly defined, and can be examined by any interested advertiser or agency. These standards result in audiences of men who benefit from the publication's editorial contents and whose buying power benefits the advertiser.

We make clear in the masthead of each publication that we do not offer the publications to everyone who wants to subscribe. On the average, we decline about 20,000 subscriptions a year from people who, based on our specifications, would not benefit from receiving the publications. (Current listings of subscriptions recently declined are available on request.)

In addition, the nature of our publications' editorial contents, and the subscription payments screen out people who do not meet circulation specifications.

7.

Is it true that some people don't pay for their own subscriptions?

In some cases, yes. A study of our subscribers shows that 17.3% of subscriptions are ordered and paid for by the company. Another 32.7% are paid for by the company, but requested by the individual. The remaining 50.0% are paid for by the individual subscriber himself. So, 82.7% of the subscriptions are delivered on the request and initiative of the individual. As to the remaining 17.3%, the company that buys for its key employes undoubtedly makes sure of the usefulness of the publication —particularly since it has to be renewed periodically by the payment of company funds.

8.

What does paid circulation mean to the advertiser?

Many things. But most directly and most importantly it means more evidence, and better evidence, as to publication values. Namely:

- Evidence of active interest in the publication, as represented by payment for a subscription.
- Evidence, in the same tangible form, of an intent toread the publication.
- Evidence of editorial quality, as represented by the interest and intent referred to above.
- Evidence of the reader's true evaluation of the usefulness of the publication, as represented by payment for renewal subscriptions.
- Evidence of active circulation, as represented by subscriber action in correcting and keeping up-to-date circulation lists.
- *Figures from Laboratory of Advertising Performance, Sheet 1114, will be sent on request.

This, of course, is not the complete story. Intangible benefits accrue from circulation policies based on the sound initial premise that the subscriber must be served first. Paid circulation, although an integral part, is certainly not the only ingredient of our publishing philosophy. We hope, however, that the foregoing answers have been of value in clarifying our position on this vital part. If you have further questions, won't you please contact your local McGraw-Hill representative? Or write directly to us.



How Good Are You at Scheduling Production?

This is a game in which you act as production control manager of a plant turning out just one product and with unlimited capacity. You can play it either against par or in competition with others.

450. In suite of the same of t

Your job is to devise a production plan so that you can fill weekly shipping orders from your available inventory plus current production. You won't know the size of the orders until you have set production levels for the week.

Orders vary from week to week in no discernible pattern. You are charged for holding inventories, for rent-

ing outside warehouse space in which to store it, for failing to meet shipping orders, and for the costs involved in changing the going production rate. Your object is to end up with the lowest possible costs at the end of a year.



Since it takes time to effect any changes in production schedules—to hire the necessary extra workers or to reassign or lay off workers—there is a two-week interval between the time you make a decision to change production levels and the time that change goes into effect. Thus, a decision made at the end of the first week goes into effect with the fourth week, Any change in output level must



be in thousand-case lots and may not be less than 5,000 cases nor more than 10,000. Excess production is stored in plant warehouses up to a total capacity of 240,000 cases; inventory above that amount must be stored in rented warehouse space.

The company expects weekly shipments to average 101,000 cases during the first quarter of the year. (Esti-

mates are 102,000; 103,000; and 104,000, respectively, for the second, third, and fourth quarters). More than half the time weekly shipments will be between 80,000 and 120,000 cases, and 75% of the time they will be between 70,000 and 130,000. There are no particular seasonal peaks in this business.

To get ready to play: Take 24 identical slips of paper and put one of the following numbers on each: 58,000; 64,000; 69,000; 73,000; 76,000; 80,000; 83,000; 86,000; 89,000; 92,000; 94,000; 97,000; 103,000; 106,000; 108,000; 111,000; 114,000; 117,000; 120,000; 124,000; 127,000; 131,000; 136,000; 142,000. These slips represent the weekly shipments. Place the slips face down on the table. Then prepare a scoring sheet like the sample, extending it to 52 numbered columns.

To play the game: Beginning inventory is set at 310,000 cases; place this number in column 1, line 1. Set a production level for the first week; place this in column 1, line 2. Add beginning inventory to production to get the total quantity available; enter this total in column 1, line 3. Then select a slip at random to give you and your opponents, if

In Business Education, the Game's

The game illustrated above is not usually played for fun—though it can be fun to play. It is an example of a business game, a new kind of exercise rapidly finding a place in corporate and collegiate educational programs.

Games like this, some of them as simple as this one, some so complicated they take months to play, are all designed to illuminate some aspect of business life. The executives and students who are playing them are playing in order to work better.

Enthusiasts are hailing business gaming as one of the most powerful teaching devices ever developed. Skeptics, while willing to concede that these games have a strong impact on the participants, aren't quite sure just what, if anything, some of them teach.

Despite the debate over its value, the use of this new training technique has mushroomed since the American Management Assn. introduced its "business war game" two years ago (BW-May4)

'57,p164). At least two dozen different training games are now in operation. Such companies as Westinghouse

Such companies as Westinghouse Electric Corp., Procter & Gamble Co., Pillsbury Co., Kroger Co., General Electric Co., and International Business Machines Corp. have incorporated games into their training programs. Others, like Esso Standard Oil Co. and Remington Rand Div. of Sperry Rand Corp., are considering doing so.

Boeing Airplane Co. has staged them for more than 2,000 management and pre-management trainces. Executives of several hundred other companies have played games in university or association management development programs.

• Students, Too—College students are in the act, too. Nearly every major business school and many university engineering departments are working on or playing with games. Some, like Harvard University's Graduate School of Business Administration, are still ex-

perimenting. Others, like the business schools of the University of California at Los Angeles, Michigan State University, and the University of Pennsylvania, have put games into such courses as business policy, operations research, and elementary business administration.

• Two Types—The games that these executives and executives-to-be are playing come in two basic models:

General management or "total enterprise" games are supposed to provide practice in top management decision-making. They represent the problems of running a competitive business, either in a specific industry or in a generalized business world. Some of the more complicated ones—the so-called bureaucracy games—also deal with internal management problems.

Specialized or functional games are designed to teach, or to convince participants of the value of a specific technique. They deal with particular areas of business such as marketing, systems any, the shipping orders for the first week; put this number in column 1, line 4; then return the slip face down to the pile. Subtract the shipping order from the total of production and inventory to get week end inventory (line 5). Then decide whether to increase or decrease production, or to maintain the same level. (Remember, any decision takes place in week 4; production for weeks 1, 2, and 3 necessarily is the same). Repeat this procedure for 52 weeks. If orders exceed available supply, report a negative inventory. It should take you about an hour to complete the game.

To score the game: There are four kinds of charges:

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 There is a charge of \$2,500 for each change of production level.

• There is a holding charge of \$350 a year for each 1,000 cases of inventory, whether in plant or rented warehouses. Total your weekly inventories at the end of the game, divide by 52, and multiply the resulting number of 1,000-case units by \$350. Negative inventories count as zero.

• There is a rental charge of \$1,000 a year per 1,000 cases for warehouse space for inventory in excess of 240,000 cases. Total your excess inventories, divide by 52, and multiply the number of 1,000-case units by \$1,000.

 There is a penalty charge of \$750 for each 1,000 cases ordered which can't be shipped because of insufficent inventory.

Note: The plant shuts down for vacation during weeks 27 and 28. Orders continue to be shipped, although production is zero. Production level changes requested at the

INVENTORY CALCULATION SHEET

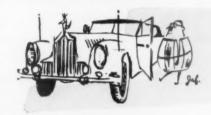
WEEK NUMBER	1	2	3	4	5	51	52	
(1) Beg. Inventory					1			
(2) Production					7			
(3) Available (1 + 2)							1	0
(4) Shipments						1	P	
(5) End Inv. (3 - 4)					D			

end of weeks 24, 25, and 26 all take effect during the 29th week. There are no other holidays during the year.

Advice: You will perform best as production control manager if you devise a long-range production strategy before the game begins, instead of playing on a week-to-week basis. Plan the optimum number of production changes, the safe limits of inventory, the proper way to prepare for the vacation shutdown.

How to judge your performance: In a competitive game the player with the lowest total charges wins. Alone or in competition, you can feel proud of yourself if your total costs average \$135,000 or less. Average players have scored around \$250,000, and some have run costs above \$500,000.

This game was developed by the industrial engineering division of Procter & Gamble Co. as an introduction to detailed training sessions in production scheduling. Its object is to help managers realize the difficulty of scheduling and the effect on costs in several areas.



the Thing

management, or-most often-some aspect of production.

• King for a Day—Of the two types, the king-for-a-day general management games, in which participants play at being president, are the older, the better known, and by far the more controversial. Most of them are variations of this basic pattern:

Players are divided into teams, each "managing" one of several competing "companies." The teams are given financial information about their companies and a general description of the rules by which the results will be scored. Then they are asked to make decisions, usually quantitative ones expressed in dollar terms, about what their companies will do. Nearly always these decisions include the price to be charged for the product and the amount of money the company will spend on production, marketing effort, research and development, and plant expansion.

· Umpired Results-The results are cal-

culated by an umpire, often but not always an electronic computer. In the scoring, the umpire uses a group of cause-and-effect formulas based on the game designer's assumptions about the way the economy works. If the game is interactive (nearly all general management games are), the formulas take into account the effect that each company's prices and expenditures have on the sales of the other companies.

The results are delivered to the players in the form of financial reports for the first round, or quarter of a business year. The players study the reports and make a new set of decisions. This process goes on for a predetermined number of "business years."

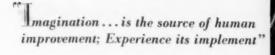
The dozens of general management games now being played differ chiefly in the number and type of decisions required. In some of them, the companies produce several products or sell in several markets. Some games allow for dividends, taxes, bank loans, wage

rates, stock market prices, raw material purchases, or improvements in production processes.

Sometimes general management games are combined with other exercises. One will be turned into an investment game next fall for a graduate course at Michigan State. Students will finance their companies by selling stock to or borrowing from students endowed with large amounts of (paper) cash. Other students, operating as brokers, will watch the financial reports and sell stock throughout the game.

Special Versions—A number of general management games are keyed to particular industries. There are games to represent the operation of gasoline service stations, supermarkets, aircraft companies, capital goods manufacturers, telephone companies, hardware jobbers, oil refiners, pipeline companies, and detergent manufacturers.

Westinghouse's Business Simulator, for example, illustrates the management





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of a generalized product department. Players have to worry about the internal flow of orders and materials, must quote lead times on product delivery, and can reduce expenses by exercising various management controls. Its companies start in different financial positions and have different histories and personalities.

A natural gas transmission industry game now being tested by United Gas Corp. permits players to sell stock and bond issues and to acquire or spin off

up to 10 subsidiaries.

A few games are getting so complicated and taking so long to play that soon, one professor fears, "we may have to go to the real world to practice for

the game world."

• Long and Complex—Next month in Denver, Carnegie Institute of Technology will unveil the most complex game of all before a meeting of business school professors. Each team will have to make between 100 and 300 decisions each quarter and will get back two or three times as many figures on its financial report. The game is intended to be played at the rate of one round a week over a semester or a year.

Most of these games are umpired by computers. Carnegie Tech's has to be. But many of the others are based on relatively simple formulas and use the computer only because of its greater

speed and accuracy.

For a game like IBM's Management Game or UCLA's Executive Game No. 2, the computer punches out financial reports in about five minutes. The same computations can be made on a desk calculator—with some risk of human error—in half an hour or less.

A few general management games are specifically designed to be scored without computers. Sometimes the formulas are simplified; sometimes the umpire refers to tables and graphs; sometimes the game is just played more

slowly

• Simpler Type—Functional games also come in both computer and non-computer versions. Most, however, are hand-calculated and relatively simple to play and score. Usually they involve some aspect of production management, such as production scheduling, inventory control, or machine loading. Most of them are not interactive; players compete only for the best score. Some are even solitaire games.

As all these games show, business gaming is a cousin of two standard training techniques, role playing and the case study. It differs from role playing (in which trainees act out some business situation) chiefly in its use of rigid rules, enforced by an umpire, and in its emphasis on quantitative, material problems rather than on human re-

lationships.

Gaming differs from case studies in its

car



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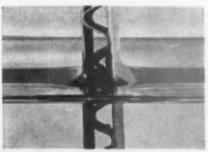
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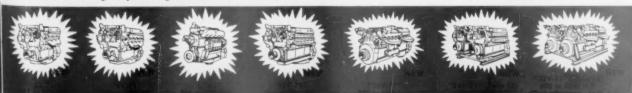
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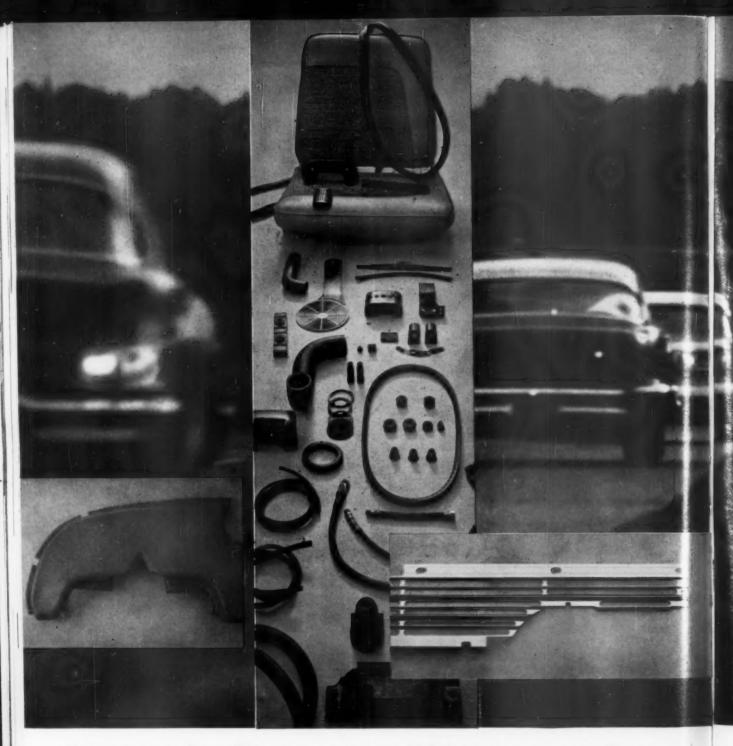
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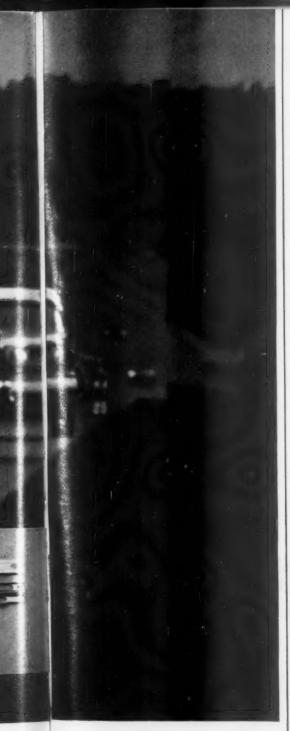
Back in the bare beginnings of the motor car age, Firestone achieved one of its first successes. It pioneered a better tire to answer the crying needs of an infant auto industry. Today, this lusty infant has grown to be a giant of the industrial world. And, during every year of its growth, it has looked confidently to Firestone for more and more contributions to the industry.

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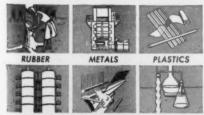
stone promise. And it's a promise that's being made good in six major fields of industry: rubber, metals, plastics, synthetics, textiles and chemicals.



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pattern of repeated decision followed by rapid feedback of results. Students have to live with the consequences of their decision. And they can go back and try out alternative strategies. Because of this continual testing of solutions, proponents of games like to call them "dynamic," "living," or "supercharged" case studies.

 Emotional Involvement – Business gaming's most unusual quality is the apparent realism of the world it creates.
 Particularly in the highly competitive general management games, participants seem to forget that the dollars they are

making aren't real.

Ingenious gimmicks are used to reinforce the illusion. In Imperial Oil Ltd.'s ASCOT, which portrays the operation of up to five competing service stations, players must make their decisions to the accompaniment of automobile motors and clanging tools. Service station background noise, taperecorded at real stations, is piped in continuously.

Even without such help, however, players of business games quickly get caught up in their companies' problems. They roll up their sleeves, skip lunch to work on charts and graphs, and argue hotly over policy decisions—sometimes

even come to blows.

This strong emotional involvement is what makes business gaming such a powerful teaching tool. It is "such an effective pedagogical device," says Michigan State Prof. Richard C. Henshaw, Jr., "that I believe it may become more widely used than the Harvard case method is today." Some predict gaming will assume the role in business schools that laboratories play in physics departments and moot courts in law schools. Dean Lowell W. Herron of Clarkson College of Technology calls it a "significant forward step in teaching methodology." Paul S. Greenlaw, Davton Rubber Co. director of management development, thinks it has "as much promise as an executive development tool as any I have seen."

Game players are enthusiastic, too. Westinghouse's Business Simulator was given a 4.88 rating out of a possible 5 by participants in a recent training session. A game play at Indiana University received a score of 8.66 out of a possible 10 from the participants, and a third of them called it the most valuable educational experience they had ever had. Other game administrators

report similar response.

• Educators Are Cautious—Some educators are more cautious. Russell H. Hassler, associate dean of Harvard's B-School, calls gaming "a very useful technique" but doubts that it will replace the case method. He says he can't quite visualize students "playing games all day long."

Many are skeptical of some of the

rather sweeping claims made for games, particularly the claim that they provide a kind of synthetic executive experience without the risks of on-the-job experience and in much less time.

Most of those who have had experience with games agree that they do provide a vivid introduction to business. IBM puts newly hired sales trainces through a game to orient them to the competitive world they are entering. Michigan State will have more than 300 freshmen play a game next fall as part of their first course in business administration.

The games emphasize some broad facts of business life—for example, that all areas of a business are interrelated, that all of them are important, that they have to be coordinated. And these ideas are conveyed to the students. Said one IBM engineer after playing a game, "For the first time in my life I could really feel the need for a salesman." One Boeing trainee learned that "business is a complicated operation."

Games also provide practice in problems-solving—particularly, if the instructor so chooses, in the use of analytical techniques—and in teamwork.

It can be argued that, because the rules are based on dubious assumptions about how business actually works, they don't teach much about business. But even if that's so, Prof. James R. Jackson of UCLA suggests, the games give "experience in learning from experience."

• Criticism—Those who deny that games can ever teach decision-making argue that they are much too abstract. Obviously the games omit many factors that influence results in the real business world—ranging all the way from international crises to errors by the typing pool. Most serious, many think, is the failure to allow for any sort of inefficiency within the company.

The bureaucracy games are in part an attempt to meet this criticism. In its management course, AMA now is using one that has so many decisions—more than 70—and so many team members—10 to 15—that the participants are forced to organize, to delegate authority, to assign responsibility, and thus to practice the techniques taught in the course. The Carnegie Tech game has a similar aim.

Games also are criticized for their stress on quantitative factors. In most of them every dollar spent on sales promotion or on production is just as effective as every other dollar. But it's not how much you spend but how, when, where, and with what skill that determines success in business, Allen A. Zoll, Boeing's management education chief points out. And, notes Seymour Levy, Pillsbury's manager of personnel research and manpower development, decisions made in the games have im-

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Most of this controversy concerns the general management games. About the functional games, with their more limited objectives, there has been less dispute.

 Indoctrination—Functional games have been used chiefly to demonstrate techniques, to sell ideas, and to motivate students to further study. Because they are so convincing, these games seem to be particularly suited to indoctrination.

Westinghouse, for example, used one inventory control and distribution game to sell a staff-developed statistical control technique to the line. The line managers played the game twice, first by their own methods, then by the new one. The 15% improvement in their score convinced them.

Another company put marketing men into a production control game. Soon they were acting like loyal members of the production department, bitter about the highly inaccurate sales forecast they had to work with.

• Potentially Dangerous—However, this power of indoctrination also makes games a potentially dangerous tool, Penn Prof. John F. Lubin warns. Because students are less skeptical toward "facts" they think they are learning from experience instead of from a book or a lecture, there is nearly as much danger of teaching the wrong things as there is of not teaching the right ones, he says.

That's why experienced game users like AMA's Andrews M. Lang insist that games should be used only in combination with older teaching tools and in programs with definite teaching objectives. Too many people, he thinks, have designed games first and then started to figure out what they could be used for.

Jackson agrees that "most of the 'work' done so far has really been 'play' for everyone concerned." Now, he feels, it's time to settle down and "orient our efforts toward purposes other than gaming for its own sake."

There are several possible purposes in addition to training. Some companies are trying to build games so true to life that they can actually be used to pretest strategies.

Research Possibilities—Other researchers are attracted by the human relations research possibilities of business games. The games, they think, offer "completely involved human subjects engaged in relatively realistic business activities but under controllable laboratory conditions."

Princeton University, Cafnegie Tech, and Case Institute of Technology are among the universities using games to study organization structure, leadership, and other aspects of small-group

behavior. Imperial Oil is studying the process of decision-making under stress.

Executive testing also has been suggested as an application for business games. So far, however, no one has succeeded in proving that the games test anything other than ability to play the games.

MANAGEMENT BRIEFS

Latest incident at Crane Co.: Robert B. Crane, member of the founding family and assistant to the sales vice-president of the company, was fired by Thomas M. Evans—who recently took over the Chicago plumbing supply house (BW—May2'59,p28)—because of his "public statements on company operations." Crane had announced his availability for the company's unfilled presidency. He remains a director.

Median pay for members of the National Society of Professional Engineers has gone up 27% since 1952, and the spreads are narrowing. A survey just released by NCPE shows the greatest percentage increases going to engineers in the lowest pay brackets. Increases were lowest in the highest-paid fields (such as chemical engineering); and raises for younger men more in line with those for older engineers.

Charity is getting less from the smaller companies when contributions are figured as a percent of net profits. Figures just compiled by the Foundation Library Center for the year ended June 30, 1957, show that concerns with less than \$1-million in assets gave charity the equivalent of 1.52% of their profits. In 1955, they gave 1.58%. The smaller the company, the greater the difference: Companies with assets of less than \$100,000 donated 1.18% of profits in 1957, compared with 1.55% two years before.

Gulf Oil Corp.'s political action program (BW-May30'59,p45) is now ready to go. Specially trained employees will work directly with politicians in their areas for "mutual understanding." A new Washington office will supply these representatives with legislative information.

Arab anti-Semitism does not justify Arabian American Oil Co.'s asking the religion of prospective employees, the New York State Supreme Court decided last week. The New York State Commission Against Discrimination had exempted the company from state laws prohibiting such questions because most of its employees are sent to Saudi Arabia, which does not grant visas to Jews. The court annulled that ruling-



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Cellophane manufacturing is rapidly becoming one of the most competitive industries in the country today. Ten years ago, this wasn't so. E. I. du Pont de Nemours & Co. and American Viscose Corp. were the only producers, du Pont having the bigger share, and demand generally exceeded supply.

demand generally exceeded supply.

In 1947, however, the Justice Dept., believing du Pont had too much of the market, filed antitrust action. So, du Pont licensed Olin Industries—now Olin Mathieson Chemical Corp.—to produce cellophane, and provided technical help to get Olin started. Olin turned out its first cellophane in 1951 at Pisgah Forrest, N. C.

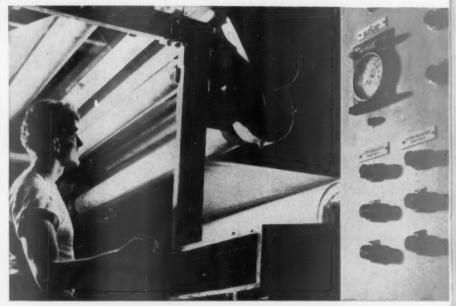
Even with a third producer, the market for cellophane has been greater than productive capacity. Last year, the companies sold 415-million lb. of the transparent film. Industry sources estimate a 500-million-lb. market sometime in 1961-1963. Current expansion by two of the major producers, however, will bring capacity to 560-million lb. annually in 1960.

Industry executives say some of this excess is necessary to take care of peaks in demand. But it's clear that supply has now caught up with and passed demand—and the fight for the sales dollar will be tough for the next few years.

• New Capacity—Two new plants have added 100-million lb. to annual capacity. American Viscose Corp., with 30% of cellophane production, is completing a 50-million lb. capacity plant in Marcus Hook, Pa., just south of Philadelphia. Du Pont, which has about 50% of the market, recently put into operation a similar-sized plant in Tecumseh, Kan. Olin Mathieson has about 20% of the market.

More competition comes from newer transparent films that are sliding into use as flexible packaging. Polyethylene, polystyrene, and vinyl all offer competition in various cellophane markets although each has different properties and prices.

• Cost Consciousness—As you might expect, the pressure to cut production costs in this situation is intense. So is the effort to guard technical secrets. But Avisco this month gingerly took the wraps off its new plant and allowed a peek at what it terms "the most completely automated systems facility among all packaging materials manufacturers."



CELLOPHANE comes off spinning line at Avisco's automated Marcus Hook plant.

Instrumentation engineers go along with Avisco's assertion at least to the extent that this is one of the most highly instrumented operations in the industry.

This instrumentation package cost \$3-million, but what it will save the company, Avisco won't say. Exact cost reductions aren't really known yet because the plant hasn't reached its most efficient production rate.

A few hints do come out, however. The extensive array of instruments in the Marcus Hook plant, which will be completed by the end of the year, will take readings and make automatic corrections at 95% of the 2,000 control points in the cellophane process. In older plants, about 25% of the controls are automatic, say Avisco engineers.

• Labor Saving—The cost of labor should be reduced considerably. Avisco's other cellophane plant, in Fredericksburg, Va., annually turns out about 100-million lb. and employs 2,000 production personnel. The Marcus Hook plant will have one-half Fredericksburg's capacity, but will employ only 650 people. Du Pont's Tecumseh plant has a labor force of similar size.

But the degree of automation in the plant requires a better trained labor force—and wages are higher than for those working in a more conventional

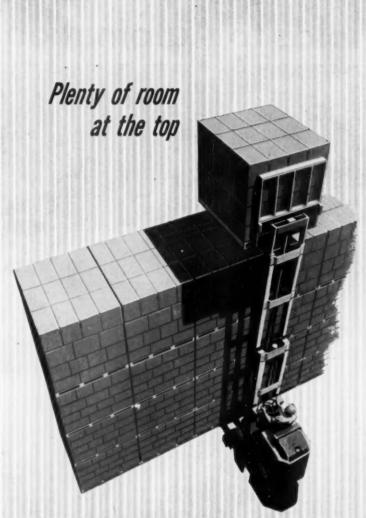
 Quality Control—More cost reduction will come through improved quality control. Production men think they will be able to eliminate almost entirely the 10% scrap that is now found in older plants.

• Galaxy of Instruments—The Marcus Hook plant contains a galaxy of automatic gauges and controls. Concentrations, temperatures, and flows are measured and regulated with hydraulic, pneumatic, electronic, and radioisotopic instruments.

Most of the indicating instruments are located at a central spot at each stage, rather than at the control point itself so that readings on variables are shown at once. If the controlling mechanism goes out of whack, an operator can locate the trouble immediately.

• Critical Controls—By far the largest aggregations of instruments are those in the last two steps of the cellophane process. The next to last is the "viscose cellar," where honey-like viscose is aged, filtered, and blended in a series of 150 tanks under carefully regulated temperature and pressure. This entire phase, formerly run by five men, is supervised by one operator from a master panel that indicates the flowlines and the status of the process.

From this panel is directed the most critical function in the cellophane process, the pressure of viscose flowing to a casting head where it is turned into raw cellophane. Pressure is maintained in a variable speed pumping system in which instruments gauge pressure and relay it quickly and accurately to the controlling mechanism. Avisco engineers say they have narrowed tolerances



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in pressure control to one-fifth that of earlier methods.

After the viscose has been extruded through the casting nozzle, which has a long narrow slit submerged in a diluted acid bath, it hardens into raw cellophane and is passed along a series of rollers—called a spinning line—through various chemical baths to be made clean and clear. It is softened with glycerin, dried with heated rollers, and finally wound on a metal core.

• Automatic Scanner—This last and most complex phase of making cellophane has about 60 variables on each of 10 spinning lines. This section of the manufacturing process is evaluated and controlled by an automatic continuous scanning and data logging apparatus with more than 500 units, one of the largest in private industry.

This device is capable of rendering a complete readout on the spinning operation in one minute. For practical purposes, Avisco is taking readings, which are recorded on electric type-writers, about once every 15 minutes. Earlier visual readings and manual regulation required five to six hours for a complete check and readjustment.

• Production Speed-Up—In addition to instrumenting the Marcus Hook plant, Avisco has redesigned some of the equipment to speed up the production process. Some batch steps have been combined to make the process more continuous.

Steeping sheets of pulp in caustic soda, squeezing them dry, and crumbling them are three separate steps in older plants. In the Marcus Hook facility, they are run one after another in a continuous vertical process.

This phase has also been considerably automated. Pulp sheets used to be fed into the steeping vat by hand, with a 2% margin for error in correct proportion to the caustic soda. Now they are dropped in mechanically—an instrument constantly taking readings on the degree of concentration within the vat—and the proportion is kept consistently within a fraction of a percent of accuracy.

• Temperature Tests—Similarly, tem-

• Temperature Tests-Similarly, temperature throughout the first steps is kept within two-tenths of one degree of correct temperature and is constantly measured. Prior to this, samples of a batch might be taken, tested for temperature, and the adjustment made manually.

The instrumentation package in the Marcus Hook plant is a noteworthy step in the long road to a completely automated, computer-controlled plant. The plant could be run largely by computers now—the technology is known. But with so many variables and about 100 types of cellophane, a computer big enough to handle the operation would be too expensive at present. **END**





The Service Man Looks at RCA 2-Way Radio and Sees More Trucks on the Road

It only takes a quick look to see radio's advantages in keeping rolling stock on the job. When the service man looks at 2-way radio he sees himself seated in the midst of his trucks on the highway! He's "close" enough at all times to give immediate attention to breakdowns, to save time of drivers in phoning for road service, providing new efficiency in keeping the maximum number of trucks on the road.

You can cut your truck maintenance costs and servicing time with 2-way radio, especially if you standardize on low-maintenance, high-dependability equipment from

RCA. This quality equipment is backed by the leader in radio and electronics, built for day-in day-out performance. Advanced engineering means greatest satisfaction, quality features. Expert service by RCA's own service technicians assures peak operation.

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TYPE OF BUSINESS_

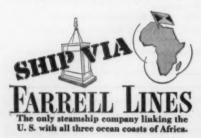
ADDRESS ZONE____



A Zulu in full tribal dress dips his hand into the frozen food cabinet of a South African supermarket . . . and completes the link of old and new that involves two continents.

The freezer cabinet came from the U. S.-shipped via Farrell Lines by the Kelvinator Division of American Motors Corporation. It is representative of the phenomenal progress and development of this "Continent of Contrast". . . and of the expanding African market for U. S. goods.

Farrell Lines is expert in this market, with years of invaluable experience gained through carrying a countless variety of products to Africa and back. For answers to your questions about African trade, write or call: Farrell Lines, 26 Beaver St., N.Y. WH 4-7460.





BIGGEST piece of beryllium ever forged-80 in. across and 3 in. thick-is being removed from top of one of huge dies that shaped it at Alcoa Cleveland Works as . . .

Beryllium Heads for Space

Huge forging of light metal is destined for first space capsule, to help its passengers make a safe return to earth.

With a whining sound like something from a science fiction thriller, the Aluminum Co. of America's largest forging press put its full 50,000 tons of muscle behind a giant squeeze last week. The result-the first stage of which you see in the picture-made a fine packet of news, with an impact both for the present and for the space-traveling world of the future:

 The jaws of the giant press shaped the largest piece ever made of beryllium metal-a lightweight material that is very difficult to work. The operation, proceeding just as planned, yielded the dish, some 80 in. in diameter and 3 in. thick, that the men in the picture are removing from the die.

 The forging revealed a good deal about the first capsule that will carry men into space. The beryllium dish is an essential part of the Project Mercury capsule-the part that will permit it to reenter the atmosphere without frying its occupant to a crisp.

· Combined Effort-The record-sized beryllium forging required the combined talents of the Brush Beryllium Co. of Cleveland and Alcoa. Brush supplied the huge billet-more than 5 ft. in diameter and 5 in. thick. It was hotpressed from beryllium powder; Brush believes it's the largest piece ever made by powder metallurgy techniques. It's certainly the biggest piece of beryllium ever made in the Free World, probably the biggest anywhere.

Squeezing it into shape required the largest industrial press available, so it was shipped to Alcoa's Cleveland Works. A special furnace had been designed and built to heat the billet to forging temperature-about 2,000F. Specially heated and lubricated dies were needed; and the billet was encased in a steel jacket to keep the beryllium from oxidizing in the heating furnace.

The finished forging went back to Brush this week for final machining into a shiny dish about 74 in. across and only 1 in. thick-all ready to go into the space capsule,

• What It Will Do-Designers chose beryllium for two reasons. It is lightweight, weighing only about one-fifth as much as steel. But it's tough, just about as strong as steel, with peculiarly desirable heat absorption qualities. In the capsule, the beryllium will act as a heat sink-it will absorb, then slowly dissipate the heat generated when the capsule hits the atmosphere.

Knowledge that such big pieces of beryllium are feasible should be good news for aircraft and missile designers and nuclear reactor engineers. It's one of the few strong, light metals that don't lose strength at temperatures up to 1,500F. That makes it ideal for hypersonic aircraft or missiles. In nuclear reactors, it has the unique property of reflecting neutrons; so it increases the efficiency of the chain reaction when used as a shell around the reactor core.

But in the huge pieces now proved feasible, beryllium comes high. Brush executives guess the 74-in. dishes will cost from \$25,000 to \$35,000 each, even if demand permits a production

run of 20 to 30 pieces. END

"the fast way out of today's profit squeeze is through the use of more efficient materials which cost less to machine and fabricate, yet produce a better product..." i.e. Die-Casting with Asarco Zinc Alloys



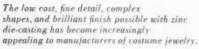
Die-Casting with Asarco's Federated



Low machining costs, superior castability, and an excellent plating surface are the big reasons why Di-Metal castings are favored for fuel pumps, carburetors, grilles, lamp housings, instrument panels, horn rings, and many other functional and decorative automotive components.



Di-Metal castings make possible the faithful reproduction of detail that's so important in producing trains and other toy miniatures which look "just like the real thing."



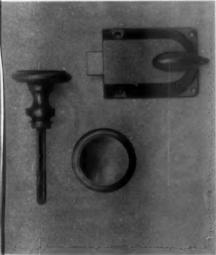


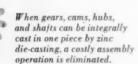
Di-Metal Zinc Alloys can cut your costs...and produce Every designer will sit up and take notice when he sees how easy it is to produce a better product in the

Every designer will sit up and take notice when he sees how easy it is to produce miniature objects with movable parts, even linkage, in one Di-Metal zinc casting. This is actual size of die-cast scissors.



Zinc die-casting provides the hardware field with the smooth cast surfaces so necessary in producing an attractive, lasting finish.





bargain! There's a big swing in metal parts production today to die casting with zinc—and it certainly makes good sense.

For one thing—Federated Di-Metal (alloyed from Asarco's Special High Grade Zinc 99.99 plus % pure) is lower in material cost.

But the big savings come in production. The low melting point of Federated Di-Metal cuts casting time to the bone. Die casting at lower temperatures calls for less expensive dies—and they last far longer.

Castings can be held to very close dimensional tolerances so that there's a minimum of machining and finishing. And even when this is necessary, highly ductile zinc is easy to work.

Die casting with Federated Di-Metal can produce the most complex shapes, the thinnest section walls, the smoothest casting surfaces. The castings have impact strength and other mechanical properties superior to other casting metals (with the possible exception of copper which, of course, costs more). And zinc die-castings can be readily electroplated or coated.

When you're both cost and quality conscious, you can't afford to by-pass die casting with Federated Di-Metal. It is proving the fastest way out of the present "profit squeeze" for a growing list of manufacturers in many fields.

When You Die-Cast Your Product with Asarco's Federated Zinc Di-Metal, You Profit from:

- 1. Integrated Production. Federated Di-Metal is alloyed using electrolytically refined Special High Grade Zinc from ores mined by Asarco. Alloys are produced "under one roof" at Corpus Christi, Texas, one of the world's largest electro zinc producing plants assurance of highest purity and uniformity at lowest cost.
- Nation-wide Service and Distribution. Always a Federated field engineer near you, on call from 23 sales offices throughout the country. Federated Di-Metal is stocked for immediate shipment from a nation-wide system of distribution centers.
- 3. Asarco booklets and bulletins of great working assistance to the die casting industry, detailing efficient working practices, selection of alloys, vital technical data. Write for your free copy of "For Better Die Castings," to your nearest Federated Sales Office or to ASARCO Federated Metals Division, 120 Broadway, New York 5, New York.



Other ways it pays to THINK ZINC when you're cost-and-quality conscious:

GALVANIZED STEEL. The strength of steel, the corrosion resistance of zinc-at low cost. New processing methods assure uniformly thick zinc coating. Galvanized steel can be drawn or formed. Roofing and siding sheets for farm and industrial buildings are low in initial cost, installation cost, and maintenance cost. Corrugated culvert pipe is easy to transport and install, flexible, strong, durable. Galvanized sheets are superior materials in heating and air-conditioning installations-cost less, fabricate more easily, are more rigid for longer unsupported spans, operate quieter since they expand and contract less than comparable materials.

Zine products available from Asarco:

ZINC SLAB, Prime Western, Brass Special, Intermediate, High Grade, Special High Grade:

ZINC ANODES for cathodic protection of ship hulls and other submerged steel structures;

ZINC DUST, 97% metallic zinc, 97% through 325 mesh screen;

ZINC FOIL for barrier wraps, insulation:

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NEW PRODUCTS



Tube Travels Flat



. Inflates Again in Use

To make seamless metal tubing, roll it out flat like a ribbon, then reinflate it into cylindrical tube form when you want to use it might seem to be a waste of effort all around. Yet that is the kind of tubing that Wolverine Tube Div. of Calumet & Hecla, Inc., Allen Park, Mich., is going to produce exper-imentally this fall, under the name "Strubing."

And far from its being a waste of

"We thought the helicopter was a novelty . . before we took the

BELL PENCIL TEST"



A heavy equipment manufacturer says: "A recent experiment with your helicopter pretty well proved what your 'pencil test' first showed us: there's plenty of new business in the smaller markets, but you've got to get there, and often. We accomplished this with a chartered Bell 47-J. and still kept old accounts happy with field service they hadn't dreamed of. You can't do this except by helicopter."

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- We have inspection or survey problems in mountain, swamp, island, jungle or desert areas.
- Community service relations are very important to
- We need a new prestige sales tool.

Now tear out the pencil test part of this page and mail it . . with your name, title, company and address . . to: Department 11G, Bell Helicopter Corporation, Fort Worth, Texas. We'll send you additional information about the Bell in Business.



FORT WORTH, TEXAS

SUBSIDIARY OF BELL AIRCRAFT CORPORATION



effort, Calumet & Hecla finds two big advantages in this new-type tubing: (1) It's more economical to ship the tubing to the point of use when it's flattened to a ribbon and rolled up; and (2) it is made by a cold-rolling process that makes it possible to produce thinner tubes than are now economical, and to use materials that can't be used or are uneconomic to use in hot-rolling.

• Thinning It—Strubing—the name is an abbreviation for strip tubing—is made by taking ordinary tubing and passing it through a rolling mill, where it is flattened into a two-layer ribbon. The rolling process makes the original tube longer by making its walls thinner, but does not change the inside diameter. The more the Strubing passes through the mill, the thinner it gets.

When you want to use the tubing, you can reinflate it either by water pressure, by air pressure, or by mechanical means like passing it over a mandrel. The thinner the tube wall, the less pressure is necessary to reinflate it.

• Many Uses—Uses for Strubing are foreseen in construction, electric utilities, rockets, farming, packaging, and manufacturing. Ductwork made of Strubing for the heating system of a seven-room house could be shipped in a box the size of an orange crate instead of in trailer-truck loads.

The makers expect Strubing to be cheaper than conventional tubing, because it's cheaper to make thin-walled tube by cold-rolling it flat than by conventional drawing methods.

Computer Printer

A. B. Dick's new electronic process, Videograph, greatly speeds printing of computer output data.

A new electronic process developed by A. B. Dick Co., the Chicago maker of duplicating machines, greatly increases the speed with which computer output information can be printed. It also can transmit and reproduce documents in facsimile and make pictures of moving objects. The system can reproduce the original image on a printed page or display it on a television screen. It is called Videograph.

Videograph combines the techniques of television and electrostatic printing to achieve an output of 20,000 characters a second or 10,000 lines of computer information a minute. Present computer printers have a top speed of 1,500 lines a minute. An electrostatic teleprinter developed by Burroughs Corp. (BW-Nov.8'58,p62) has a prac-

Automatic Electric uses 5 BODINE MOTORS

to give you the time of day

When you phone for the correct time, the reply could come from an automatic time announcer made by the Automatic Electric Co.



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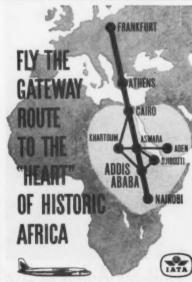
When you're planning a new or improved product, talk to a Bodine engineer. You'll avoid needless experimenting...and probably will find one of 3500 standard Bodine Motors suitable for your product.

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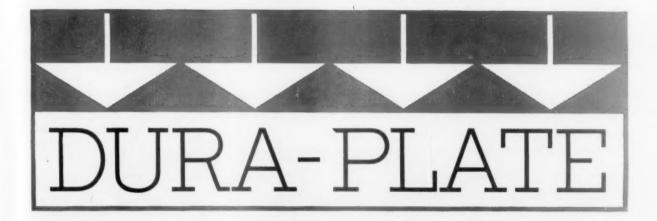
Fly the route of history via Ethiopian Airlines! See Cairo, the Red Sea and Ethiopia, Land of the Queen of Sheba. Africa offers today's newest travel adventure, greatest business potential. Fly overnight from Frankfurt (now 4 flights weekly) in luxurious DC-6B's. Incomparable service, first class or tourist. Visit one of our 5,000 offices in the United States and Europe—YOUR TRAVEL AGENT.

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BROWN LIPE CHAPIN



New Chrome Plating advance gives bright work new dimension in durability!

Here's a shining example of the many benefits available for your products at Brown-Lipe-Chapin. It's Brown-Lipe-Chapin's new DURA-PLATE! This new and unique process of chrome plating gives your product active sales appeal with the rich quality of gleaming chrome . . . and adds a new depth of durability that will last the life of your product.

DURA-PLATE consists of two layers of laminar and columnar nickel with a layer of chrome five times as thick as produced by conventional methods. The result is a surface almost impenetrable to corrosion. DURA-PLATE can be applied on any product made of steel, or on zinc die castings . . . at no extra cost!

DURA-PLATE is the result of the advanced research, the development of new techniques and thorough testing that continue at Brown-Lipe-Chapin to help make your products better.

DURA-PLATE is typical of the many benefits you get from Brown-Lipe-Chapin when you call on their extensive facilities for die casting, metal stampings of all kinds, electroplating, anodizing and painting.

If you're looking for a bright difference in your product, call on Brown-Lipe-Chapin, Division of General Motors Corporation, Syracuse, New York.



59

RELIABILITY by BROWN · LIPE · CHAPIN

DIVISION OF GENERAL MOTORS CORPORATION



tical capacity of 250 characters a second. · How It Works-The key component of Videograph is an electrostatic printing tube. It resembles a television picture tube, but instead of a phosphor screen in front, it has an array of tiny wires projecting through the front of the glass tube. The electron beam in the tube gives a negative charge to combinations of wires whose ends form the shape of the desired letter or picture, much as lettering is formed on panels of light bulbs in some electric signs, though the electric charges are not visible. The television signal input to the tube determines which wires will receive the charges. The negative charges are transferred to special paper where they form a still-invisible image. When the paper passes through positively charged powdered ink, the ink sticks to the negatively charged image, and it becomes visible. A heat-treatment makes the imprint permanent.

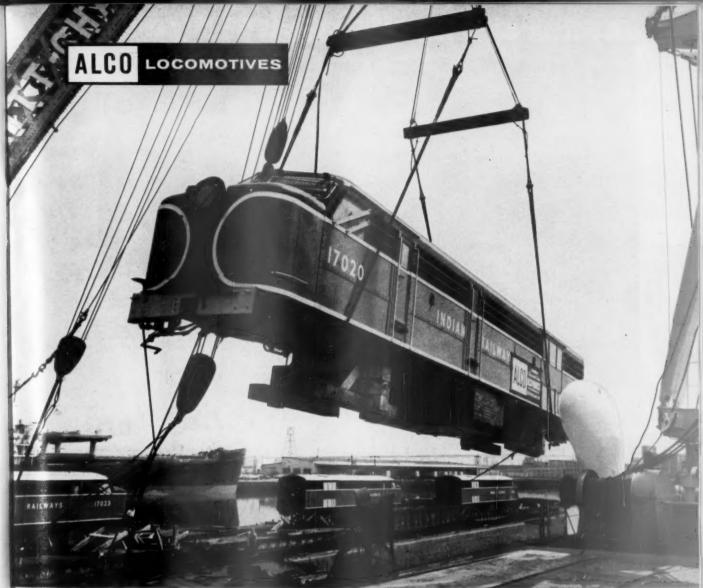
The tube can print a great variety of images, such as different type faces and pictures, because it has as many as 32,000 wires in a 2½-in. surface. Like a TV picture, the image is made up of many tiny lines—but a TV picture has only 525 lines and a Videograph picture has several thousand.

• Versatility—For facsimile reproduction or picturing of moving objects—such as freight cars, for identification—the Videograph uses a scanner similar to a TV camera. For printing computer output, a character generator replaces the scanner. This is a device which takes in electric pulses from the computer and puts out equivalent TV signals representing letters, numbers, and symbols to the electrostatic printing tube.

A counting device will keep the original image before the scanner until any number of copies up to 1,000 have been reproduced. Remote transmission from scanners in many different places to a centrally located printer is possible, using a coaxial cable or microwave radio transmissions.

• Production Plans-Dick now is making Videograph systems on a custombuilt basis, but eventually expects to produce standard systems as well. First customers are the Navy Publications Office, which will use the Videograph to reproduce inventory documents; the Denver, Rio Grande & Western RR, which will use it on 10 microwave transmission points to handle freight documents; and Time, Inc. The magazine publisher will use two Videographs to print subscribers' address labels from a computer's memory unit at the rate of about 2-million per daily shift. This job now requires 18 printers on two

Price of the subscription printer is about \$135,000, and Dick expects most systems to be in that range. END



Write for full-color reproduction (12 x 20") of Howard Fogg painting showing this ALCO locomotive in use in India.

ALCO "World" locomotive swings aboard freighter at Port of New York, bound for India. Wheel trucks are loaded separately.

THE NEW MUSCLE OF A QUIET REVOLUTION

On the railways of the free world, a quiet revolution for growth is now underway. Country after country, recognizing that economic expansion is linked to modern rail transport, is replacing steam power with the muscle of diesel-electric locomotives.

For the greatest single portion of this new diesel horsepower, railways overseas have turned to Alco Products, Inc. In doing so, they gain the economies of mass production, along with such cost-saving features as lower fuel consumption and reduced maintenance. They also obtain locomotives readily adapted to their terrain and operating conditions.

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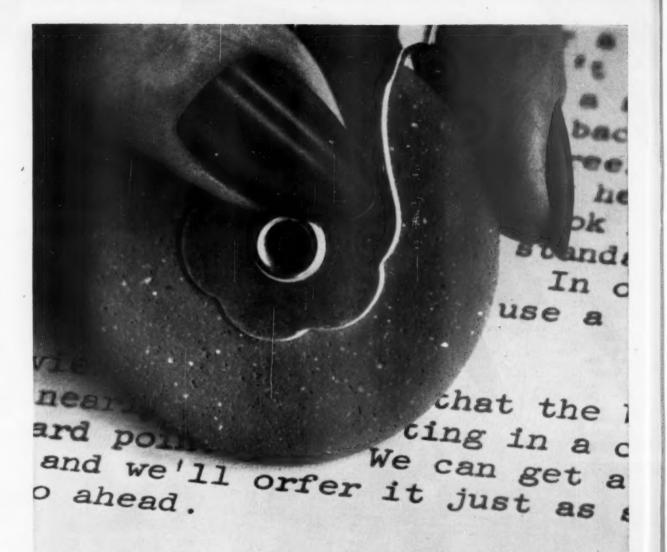
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ALCO'S "World" locomotive, for example, operates in the searing heat and sifting dust of India and Pakistan as easily as it does at 14,000 ft elevations in the Peruvian Andes. Its versatile wheel trucks are at home on rails with gauges from 3 ft 3 in. to 5 ft 6 in. At 1950 hp, the "World" can handle both high-speed passenger and freight service.

This locomotive is just one of Alco's complete line of export diesel-electric motive power. Railways the world over operate Alco power, at significant savings, to speed transport and bolster growth. Alco Products, Inc., Dept. 116, Schenectady 5, N. Y.

ALCO PRODUCTS, INC., New York - Sales Offices in Principal Cities - Makers of: Locomotives Nuclear Reactors - Diesel Engines - Heat Exchangers - Forgings - Springs - Steel Pipe - Oil Field Equipment

ALCO



A MISTAKE DISAPPEARS IF IT'S ON HAMMERMILL BOND

Even a perfect secretary makes a typing error now and then. How often, you'll never guess if she has Hammermill Bond in her typewriter.

Hammermill Bond erases easily, neatly. And because it contains exclusive Neutracel® pulp, it has

a smoother, more level surface. It makes a better impression because it takes a better impression.

Get letter perfect letters every time. Give your secretary Hammermill Bond. Manufactured by Hammermill Paper Company, Erie, Pennsylvania.

LOOK FOR THE WATERMARK OF THE BEST KNOWN NAME IN PAPER

BOND

BOND

Buyers Bent on Economy Bid High for Used Cars

Detroit is puzzled by demand for used cars along with strong new car market. But it can be explained.

The unpredictable American consumer, who has already forced the automobile industry into the revolutionary step of making cars smaller instead of bigger, is at it again.

The public is buying used cars as if the source were about to dry up-and paying high prices for them. At the same time, new cars are also selling at

a great rate.

This shows up not only in the marketplace but also in the latest pulsetaking by the University of Michigan Survey Research Center. Consumer intentions to buy used cars are at an alltime peak; prospects for new car sales, while not nearly so strong, also show improvement.

· New Market Law-This kind of consumer behavior has Detroit completely

It seems to confound the laws of supply and demand. When new car sales are high, there are lots of tradeins. With ample supply of used cars, prices are supposed to soften. If they don't soften, the differential between prices of new cars and used cars narrows, and used car buyers find it easier to step up to a new car. So that should tend to dampen used car sales.

What kind of crazy market is this, auto people ask themselves, when both new and used cars are moving well?

· Economy Wave-Dealers interviewed by BUSINESS WEEK reporters had no difficulty answering. "People are growing economy-minded," says a dealer in Seattle. "They think it is foolish to have so much money tied up in a car as you have to at new car prices."

"The bulk of our buyers," echoes a Miami man, "are those who can't afford new car prices. Even today, with times good, the buyer goes in with the minimum downpayment and with monthly payments spread out as far as possible."

The dealers find a lot of angles to this economy kick. A Buick dealer in Houston philosophizes: "Now it seems people want a low-priced job. A while back, they seemed to want to brag about how expensive their car was; now they want to brag about how cheaply they bought a car.

A Florida dealer notes: "Lawyers and businessmen who were ashamed three years ago to park an old car downtown

aren't ashamed any more. In fact, it's a mark of distinction to have an older

In Milwaukee, dealers report that used cars of all prices are selling-but the most popular is the low-cost, gaseconomy car, six cylinders with a standard transmission. Often this stripped utility model-called a "Sally Rand" in San¹ Francisco-goes to a suburban family as a second car. "Old gas-eaters are murder to get rid of," reports a

dealer in Chicago.

· Welcome Mat-If all this is true, it could be very good news for Detroit. There are many reasons for the forthcoming compact cars of General Motors, Ford, and Chrysler. But the primary consideration is a belief the consumer wants to spend less on his automobile transportation, for either a first or second car. The number of people the dealers say are buying used cars in rebellion at the price of new cars would tend to support the factory executives' assessment of the market.

On the other hand, if you want to be cautious, you can wonder how many of the present used car buvers would have been prospects for the compact cars if they had waited a few months. A used car man in Pittsburgh notes that many buyers are taking cheap used cars "because they're marking time, waiting to see the small cars this fall.'

But most used car purchases are in the area from \$800 to \$1,800. Will this take the buvers out of the 1960 market? Why didn't they wait for the new

smaller cars?

· Driven to Death-What the dealers have to say about the condition of the cars that are being traded in furnishes

Before, six out of 10 trade-ins were in good condition to retail-now only two or three out of 10 are any good,' grumbles a Boston dealer.

People are just driving more than they ever have, and when they trade in a car, it's really beat," says a Los Ange-

les Rambler dealer.

A Miami dealer notes his reconditioning cost has jumped from \$65-\$70 per car last year to \$110-\$115 this year.

· Lost Buyers-In St. Louis, the demand is for the \$1,000-\$1,500 car. "This is the market of the man who has a 1951-52 model, who wants a good clean 1956-57 that won't cost him more than \$60 to \$65 monthly for two years, reports a dealer there.

You could make a case from these comments and many others like them that most people should have traded in







ECONOMY is what buyers seek in a used car, but they are also-like this man-increasingly critical of a car's condition.



last year or the year before. Detroit has been looking for these buyers, in fact, since 1957. Last year, when the new car market dragged while the used car market was strong, some people who normally would have bought new cars went to the used market instead.

But most people just didn't buy at all—they kept driving the "old clunks." They didn't buy because of:

• The state of the economy—all the figures show that while business was tailing off, people were stashing savings away at a great rate. They didn't know what the future would bring, so they were going to keep the cash on hand to meet it.

• Their apparent dislike of recent models—at the prices demanded.

So this summer, a grand and glorious summer of the highest employment in history and the greatest business activity in years, people wanted cars to travel in. They couldn't make the old one do another few months, and some didn't want to buy a new car so close to the advent of completely new models. In June, used car sales totaled 1,320,000 units, the best month since August, 1955. Supply on dealers' lots averaged a rockbottom 20 days as of June 30, in spite of the fact that the best new car sales since 1955 were also bringing in a torrent of trades.

One reason advanced by an auto company analyst for the booming used car market is that, last year, franchised dealers learned it was possible to make as much or more profit on a used car as on a new one—so they aren't neglecting the used car side of the business.

• Hot Numbers—Dealers all over the country agree the hot merchandise is the 1955 to 1957 Fords, Chevys, and Plymouths. Ramblers are popular, too, but relatively few were made in those years, so they do not have much total impact. Hardtops, station wagons, and—at this time of year—"rag tops," or convertibles, are the popular styles.

In San Francisco and Los Angeles, a good clean '55 to '57 Ford, Chevy, or Plymouth is bringing as much as \$200 over "book"—the average retail price for a car, shown in used car price guides issued periodically. Chicago reports the fastest-selling used car is the 6-cyl. Chevy from 1955 to 1957. In Atlanta, it's both Fords and Chevys of those years.

"I can't keep a real clean 1955 Chevy on my lot," says a St. Louis dealer.

This leads to the conclusion that, within a few months, cars of that vintage are going to be out of stock—unless the 1960 models suck them out of hiding. Since those were high production years, it's evident people are holding on to them. There are now 18-million cars on the road built between 1955 and 1957, and 28.5-million built before 1955. These last appar-



Synthetic fabrics that mean more fun afloat

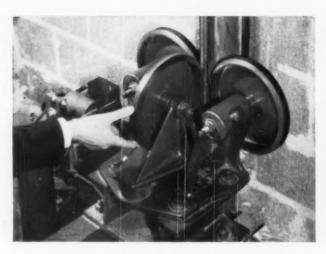
Enjay PARA XYLENE helps make the polyester fibers from which Dacron* is made. New colorful sportswear gives long wear, dries quickly, stays neat and crisp in ocean spray and strong sunlight—even after many soakings in salt water. And after repeated machine washings, it needs little, if any, touch-up ironing. In textiles, and other industries, Enjay research works constantly to produce better products from petrochemicals. Can our research facilities help you produce a superior product? For more information and technical assistance, call or write the Enjay Company today!



EXCITING NEW PRODUCTS THROUGH PETRO-CHEMISTRY

*Dacron is Du Pont's registered trademark for its polyester fiber

ENJAY COMPANY, INC., 15 West 51st St., New York 19, N.Y., Akron . Boston . Charlotte . Chicago . Detroit . Los Angeles . New Orleans . Tulsa



ROLLING ON RUBBER . . . Quiet elevators just don't happen-they're planned that way. You'll see how a Westinghouse Operatorless Elevator cushion-rides on rolling rubber, trapping vibration and noise. You'll see the cars operate on clean, dry rails-like an express train on rubber wheels.



APPLYING THE BRAKE ... No "brakes" are used to stop a Westinghouse Operatorless Elevator. Stops are made dynamically. A brake is applied only to hold the car at floor level after it stops. You'll see how this is done.

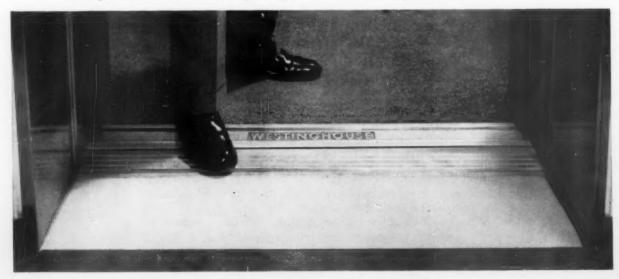
WESTINGHOUSE INVITES YOU TO EXPERIENCE THE

"30-Minute PRE-INVESTMENT

Eye-Opener" Judge for yourself the benefits of Westinghouse Operatorless Elevators during this Behindthe-Scenes Demonstration

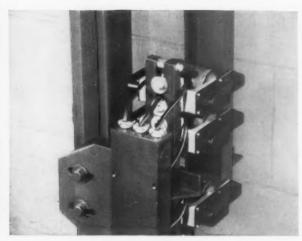
ON THE LEVEL . . . Why does a Westinghouse Elevator always glide to a perfect landing-softly, without releveling? The secret is hidden in a compact control

worth its weight in gold-but you'll see it as "standard equipment" on the elevator system. Rototrol is its name and it's a Westinghouse exclusive.





THE BRAIN ROOM . . . Here's a truly "inside" view of modern elevator engineering. Your trip to the penthouse will reveal an array of computers, selectors and shuntless relays which comprise an electronic "brain" that makes decisions every second. It supervises and directs elevator movement, knows exactly what passenger traffic demands are-and dispatches elevators where they're needed, when they're needed. It's all done instantly . . . automatically. Don't miss it!



A MATTER OF INDUCTION ... The "sinking stomach" feeling is something you'll never experience in a Westinghouse Operatorless Elevator. One of many devices built into the system that precludes such discomfort is this inductor on the elevator which controls slowdown and stop smoothly . . . accurately . . . quietly.

Westinghouse extends this special invitation to executives who are responsible for planning a new building or modernizing an existing one. In just 30 minutes, we can demonstrate technical advancements in modern elevatoring that will result in the efficient operation of your building, with complete tenant satisfaction, now and for the years to come.

Historically, the entire Westinghouse organization is electrically-oriented. Because of this, Westinghouse has brought to the elevator industry new control techniques which have produced elevator systems of outstanding excellence. Westinghouse would appreciate the opportunity to show you this dramatic "eyeopener." Make arrangements to see the "30-Minute Pre-Investment Eye-Opener" by calling the Westinghouse Elevator Division sales office in your city-or write on your letterhead to: R. H. Wagner, General Manager, Westinghouse Elevator Division, 150 Pacific Avenue, Jersey City 4, N. J.

Typical preview highlights from the "30-Minute Pre-Investment" demonstration are shown.

WESTINGHOUSE ELEVATORS AND ELECTRIC STAIRWAYS

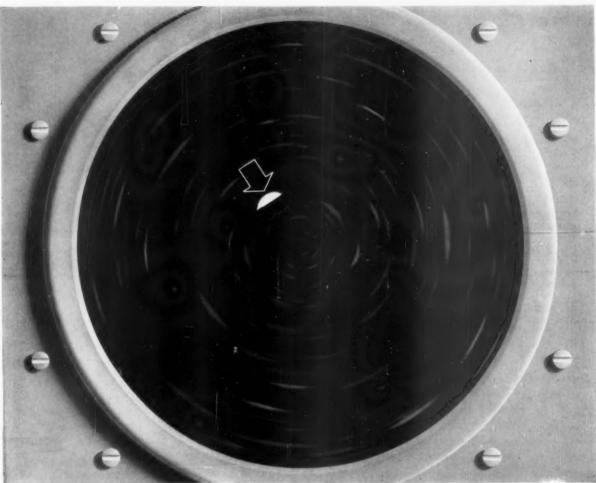
YOU CAN BE SURE ... IF IT'S Westinghouse



University Properties, Inc. "The '30-Minute Pre-Investment Eye-Opener' is something I'll remember for a long time. One thing I learned is that you certainly can't take elevator systems for granted. The demonstration I saw, prior to our selection of the elevators for the Washington Building in Seattle, gave me a greater insight into Westinghouse advanced engineering skill. It's

easy to understand why Westing-

to see and test their product."



Artist's drawing shows enemy submarine position (white pip indicated by arrow) as it appears on Bendix Sonar viewing scope in helicopter. It is the first airborne system to provide a visual presentation which pinpoints a target below the surface.

NOW NAVY HELICOPTERS, WITH BENDIX SONAR, "SEE" ENEMY SUBS UNDERWATER

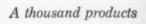
Prowling enemy submarines will meet a deadly countermeasure in Bendix* Sonar equipped seagoing helicopters which have their own ways of hunting down their prey.

This is one phase of the U. S. Navy's potent and far reaching Anti-Submarine Warfare program. A pioneer in underwater detection and communications, our Bendix-Pacific Division in North Hollywood, California, developed this first airborne scanning sonar system for use in Sikorsky HSS-2 helicopters. It is the first airborne system to provide a visual presentation which pinpoints a target below the surface. In operation, a sending-

receiving transducer is lowered into the water as the helicopter hovers. Known as "dunked" sonar, signals are transmitted through the water which echo back, somewhat like radar beams, from objects like submarines. The fact that the system is a long-range search and detection device adds greatly to its value.

Bendix produces a number of other sonic devices. These include the famous depth sounder or "fish finder"; sonic cleaners for the greatest efficiency in industrial and medical cleaning and the Cavitron* for the ultrasonic machining of germanium, glass, quartz, silicon or ferrite.







a million ideas

ently have few seekers on used car lots, and there will be fewer vet when the 1960 models come out.

· Price Ranges-This is because of another revealing point turned up in the talks with dealers.

The largest group of shoppers, accounting for 50% to 70% of used car sales, are those upgrading themselves from an older, say 1949 to 1953 model, car. The greatest demand is in the \$1,800 to \$2,200 price range, and such a car is usually the only one owned.

Then there are the predominantly suburban families who are acquiring a second car, in the \$750 to \$1,500 class. It's price and cleanliness that sells them

-not model or style.

Also buying cars in this class are people who are buying their first car, maybe with Dad's help and maybe with the first few paychecks. In Pittsburgh, this youth market seeks 1953 to 1956 cars costing from \$500 to \$1,000. It's upon these buyers-war babies now coming of age-that economists are basing their predictions of a boom in the early 1960s, when the youngsters are married, making more money, and pending it.

There are exceptions, of course, like Manhattan's low-income upper West Side, where the Puerto Ricans go for the \$600 cars, or Harlem, where latenodel Oldsmobiles are in demand from

1,500 to \$2,700.

Direct Competition-The big deand for used cars from \$1,800 to 2,000 could be really good news for Detroit-because that's where the compact cars are popularly supposed to be priced. You can see what this might do: sop up the buyers of the late-model used cars, forcing the prices of those models down within reach of the next lower group, from \$1,200 to \$1,500. This downgrading of used car prices might in turn force many of the older cars to the scrap heap.

That's something Detroit has been trying to do for years. There are about 6-million cars built before 1950 running around. Nobody has ever figured out how to compel their owners to junk them and buy later models. Maybe the price structure dictated by the compact

Used car dealers acknowledge that the compact cars will hit prices of late-model used cars. "Competition will be keen on \$1,800 to \$2,500 autos, including the late-model used, the imports, and the compact cars," predicts an Oldsmobile dealer in Chicago. "It probably won't be felt for the first five months of the 1960 model year, but next spring it will be stiff.'

Other dealers comment that foreign cars don't compete much with used cars, attracting a different kind of buyer. But they believe the compact car will

cut into import sales. END

SAVE UP TO \$400 per car per year with the new RENAULT FLEET PLAN. LOW INITIAL INVESTMENT

gas economy (up to 40 mpg), easy maintenance and high trade-in values.

(RENAULT HAS BEEN MAKING GREAT CARS SINCE 1896) Get comfort. roominess plus an easyto-park, maneuverable car. TOP NOTCH SERVICE AVAILARIE: Over 850 authorized

Renault dealers regularly supplied with parts via special air delivery from France.

RENAULT Dauphine



FOR FACTS AND FIGURES ON HOW TO SAVE \$400 PER YEAR PER CAR, WRITE:

Renault, Inc., Fleet Sales Dept., 750 3rd Ave., N.Y. 17, N.Y.

City_ (Please Print)



State



TRADE MART in Dallas houses 160 showrooms displaying 1,000 lines of furniture and accessories. Its four-story, daylit courtyard encloses a pool, garden, pergolas, and a cafeteria.

MARKETING

Texas-Size

Dallas was acting just like Texas last week. Some 8,300 retail furniture buyers jammed the Dallas Homefurnishings Mart and the newly completed Dallas Trade Mart (pictures) to inspect the wares displayed in Dallas' biggest home furnishings market yet.

Dallas already thinks it ranks second to Chicago in attendance—though some of the other markets might dispute that claim. And enthusiasts are saying the Dallas market may one day be the No. 1 in the country.

Even allowing for Texas buoyancy, buyers and exhibitors had something to talk about. The Trade Mart building is a conversation piece in itself. Says Trammell Crow, developer and part owner of the properties that make up the market complex: "I wanted a market so pleasant that buyers would linger. The longer they stay, the more they buy."

On two levels, the goings-on in Dallas have significance beyond its immediate area. Like other mushrooming markets, Dallas reflects the strong pattern of regional distribution that has had such impact on the home furnishings field in recent years (BW-Jan.24'59,p71). And the specific problems the market solves—and creates—in its own area mirror the problems of the industry everwhere.

I. Birth of a Market

The Trade Mart is step three in an ambitious project. Step 1 was the Decorative Center, separate, but nearby, that opened in 1955. It started with two units, now has four—and a fifth is planned. Here 27 wholesalers or factories, representing some 170 top lines, have permanent showrooms. Unlike the other two marts, the Decorative Center has no market period. It functions year-round, sells to quality furniture and department stores, and to decorators. Consumers—properly equipped with a decorator—can get in. But they cannot buy direct from showroom.

Step 2 was the Dallas Homefurnishings Mart. It opened in July, 1957, had doubled its space by January, 1958, to 424,000 sq. ft. It has over 300 tenants, all in the furniture trade, and is closed tight to all but retail buyers. Not even decorators can get in.

Step 3, the Dallas Trade Mart, serves basically as an extension of the Home-furnishings Mart, except that its exhibits include gift lines and carpets as well as furniture. Eventually, it will house appliances, too.

More steps are in the works. Next is to be a 300-unit motel, adjacent to the

Furniture Mart for the Southwest

marts. Plans call for a large trade arena for temporary exhibitors, conventions, sales meetings. Another cherished project of Trammell Crow is a fashion mart

for the apparel field.

• Location—The center has a prize selling point in its location. It is in the Trinity Industrial Development, five minutes from Downtown Dallas by car, 15 minutes from the airport, smack on the new Stemmons Expressway, broad link on U. S. Highway 77. It also has plenty of parking space.

Partners in the development and half owners with Crow are John M. Stemmons and his brother, L. Storey Stemmons, of Industrial Properties Corp., Dallas. The Stemmonses own the 1,200-acre tract of which the marts

are a part.

• Real Bid—Even before Crow came along, Dallas had some claim to be a furniture center. The Southwest Furniture Market had been operating there for years on a temporary basis. It is an outgrowth of trade shows started by the Retail Furniture Assn. of Texas, in 1927. Its roughly 280 exhibitors are smaller manufacturers who do not want permanent showrooms.

II. Splitting the Pie

Ask Crow why a market in Dallas and he draws a map. He spots it with the big markets: Chicago, New York, Grand Rapids, High Point (N. C.), Atlanta, the West Coast. Though Kansas City and Santa Fe have smaller markets, his map shows a great hole in the Southwest. Dallas aims to fill that hole.

The hole can take some filling. The Southwest is growing. And it is a well-heeled market. Furniture manufactures have for some years recognized its potential. In fact, the Decorative Center was born when a group of top manufacturers asked Crow where they could get a permanent showroom space.

The presence of a thriving temporary market was another argument for putting Dallas' showrooms on a permanent

basis.

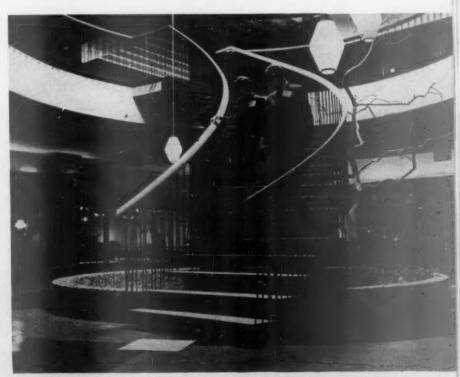
 National Pull—Dallas is by no means the only city out for a major spot on the furniture chart. High Point and its environs, Los Angeles, San Francisco, and Atlanta are expanding, too. As buyer traffic spreads out, attendance at the old standbys—Chicago, Grand Rapids, New York—tends to slip.

A big Dallas retailer makes this point: "We don't attend the other markets now regularly. We can get practically anything here."

It has come to the point, says Fair-



DECORATIVE CENTER draws buyers from top furniture and department stores. Consumers must be accompanied by their decorator, cannot buy direct from the showroom.



HOMEFURNISHINGS MART, like the other two buildings in the group, is a seductive salesman. It contains 200 showrooms featuring a total of 370 different lines.

Florida
...progress in metalworking



Florida

... progress in metalworking

IN TEN YEARS, the metalworking industry in Florida has tripled in size. This growth becomes even more impressive when rates of increase are compared with national averages.

While U. S. employment in metalworking has increased 30 per cent since 1949, Florida gained 277 per cent. In the same period, the number of new plants has risen 37 per cent in the nation and 192 per cent in Florida. Sales have increased 78 per cent nationwide while Florida's sales show a gain of 211 per cent.



The steady rate of increase in Florida's metal-working employment is nine times greater than the U. S. average.

425 NEW PLANTS IN THREE YEARS

In the last three years, 1956 through 1958, new metalworking plants in Florida totaled 425. Many of these came as a result of developments in jet aircraft, missiles, electronics and the nuclear field.

A case in point is Visioneering Company, Inc., of Sarasota, which moved to Florida in 1954. The company now has a completely integrated machine shop with over 100 high-precision machine tools. In 1956, Visioneering opened a new division, the American Beryllium Company, to machine pure beryllium for structural components on aircraft and missiles. This division is now one of the largest beryllium fabricating plants in the U. S.

The American Beryllium Company provides components to such firms as the Research and Development Center of Pratt & Whitney Aircraft in West Palm Beach, the Inertial Guidance Engineering Center of Minneapolis-Honeywell Regulator Company and the General Electric Pinellas Peninsula Plant in St. Petersburg, Martin Orlando and Sperry Microwave Electronics Division of Sperry-Rand Corporation in Clearwater.

In the opinion of Visioneering's management, one of the greatest advantages in coming to Florida is the esprit de corps reflected by the organization. President O. F. Quartullo says, "Turnover and ab-

senteeism are at record lows, and pride in craftsmanship and company reach highs unknown elsewhere in the U. S."

\$40 MILLION IN AIRCRAFT OVERHAUL

AERODEX, INC., Miami, has over 1,000 employees engaged in job machine work rebuilding aircraft engines and accessories, and manufacturing for the missile industry. This firm is one of over 50 in Florida which account for \$40 million worth of business in aircraft overhaul and conversion. Also in Miami, NORTHEAST AIRLINES has started work on a \$2 million jet overhaul center.

SUNRAY CHAIRS, INC., Hialeah, manufacturing webbed aluminum furniture, moved into a new, 125,000 square foot plant last year; now has 550 employees. LAWNLITE COMPANY in the same city expanded its facilities for making aluminum furniture; added 850 employees in 1958. Florida is the major producer of aluminum furniture in the country.



Food Machinery and Chemical Corporation, Lakeland, manufactures machinery for processing and packing citrus, other fruits and vegetables, and steel forms for prestressed concrete producers. Production of Nike Hercules Missile containers for Douglas Aircraft necessitated a 50,800 square foot addition last year which increased the total factory area to \$20,400 square feet. Employment was doubled and the payroll was increased \$2.5 million.

GENERAL CABLE CORPORATION opened its ninth U. S. plant in Tampa in 1956 to supply growing electrical wire and cable markets in Florida and the Southeast. Expansion which was planned for a half year later was required within three months—floor space was doubled and employment tripled.

FLORIDA STEEL CORPORATION, Tampa, opened the state's first steel mill in 1958 to supply five of its fabricating divisions. An expansion to double capacity is now underway.

POPULATION UP 60% IN EIGHT YEARS

Metalworking is only one of Florida's growing industries. Others include chemicals, plastics, paper, electronics, construction and the garment industry.

... Men and women like to live and wor!: in Florida. It is estimated that Florida's population, now about 4.5 million, will be more than seven million by 1970. People are moving to Florida at the rate of over 3.000 weekly.

... Personal income was \$2.9 billion for 1947. This figure rose to over \$8.1 billion for 1958, an increase of 184 per cent, which is nearly twice the national gain.

... Electric power output has nearly quadrupled in the past ten years. In the last three years, some 1,800 new industrial plants have located throughout the state.



This is the multi-million propulsion laboratory of Pratt & Whitney Aircraft, West Palm Beach. There are 17 acres under roof and 11 square miles under fence. In a blind ad to test location appeal for recruitment of engineers and technicians, Florida was favored 30 to 1 over another state.

WRITE FOR INFORMATIVE SURVEYS

"Progress in Metalworking" is the ninth in a series of industrial advertisements. A file folder of basic information is available through the Industrial Services Division of the Florida Development Commission covering the following:

Markets, Manpower, Transportation and Ports, Climate and Living Conditions, Taxes and Government, Research, Materials and Resources, Power and Water, and Industrial Growth.

The Industrial Services Division will assist in screening available plant sites throughout Florida without revealing company identities. It will gladly provide concise facts and information tailored to the needs of any company interested in Florida as a possible location. All inquiries are held in strictest confidence.

Write today to B. R. Fuller, Jr., Executive Director, Florida Development Commission, 3903-1 Carlton Building, Tallahassee, Florida.

See industrial Florida for yourself. Write State of Florida, Dept. B, Carlton Building, Tallahassee, for a new, 100page, color Vacation Guide Book to help plan your Florida tour.

This jig borer machines to a tolerance of 50/1,000,000 of an inch. To operate this and other high-precision equipment, Visioneering Company, Inc., Sarasota, obtains skilled technicians from Florida's labor supply exclusively.

geared TODAY for TOMORROW

with VIKING "gear-within-a-gear" PUMPS

Viking "gear-within-a-gear" pumps are adapted to the han-dling of fluids ranging from gaseous liquids, such as LP-Gas, to semi-solids such as tar, hog fat, soap stock and cookie dough.

This positive displacement pump has the unique and original Viking "gear-within-a-gear" design. A 48-year engineering background has developed it to the place where industry often depends on its pumping where others fail.

A size range from 35 to 1050 gallons per minute an-

swers endless pumping problems.
Custom construction to fit the need is an every-day

experience. Types of metals include cast iron, a full range of bronzes, as well as stainless steel, nickel, monel, nodular iron, steel, ni-resist and other special metals.

Send today for catalog Series 59S

VIKING PUMP COMPAN'





Offices and Distributors in Principal Cities. See Your Classified Telephone Directory.

(Advertisement)

The man from Cunningham & Walsh



Retail-minded sales expert. This is Joe Nelson, our Director of Account Management. He goes out and sells at retail too-like all our account, creative and television people. This adds up to thousands of man-hours a year behind the retail counters and our advertising works harder because of it. Cunningham & Walsh Inc. New York · Chicago · Detroit · Los Angeles · San Francisco.



PARTNERS Trammell Crow (right) along with L. Storey Stemmons (left) and John Stemmons (not shown) plan to make Dallas the furniture center of the Southwest.

child Publications' research department, where only one market can now be considered national in pull. That is the so-called Southern market in the spring and fall. High Point is the focal point, but the many factories in the area comprise this market, too.

· Distribution-Fairchild reached this conclusion, published in May, by asking over 2,000 top furniture dealers what markets they were covering in 1959, by area of their own location.

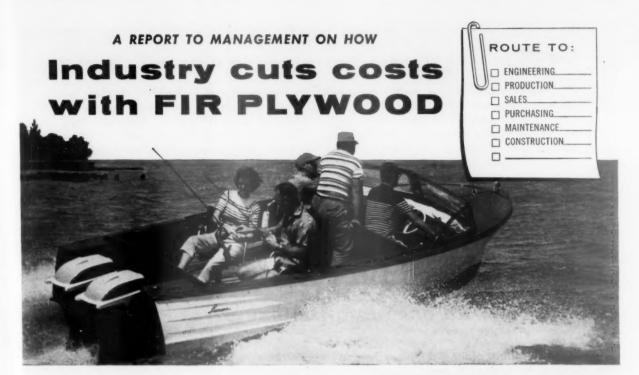
The Fairchild data did not isolate local vs. national coverage of Grand Rapids. Grand Rapids admits that market attendance used to be three or four times what it was this June 2, when some 80 manufacturers entertained some 900 customers. But, it insists, it is the important buyers who come-and they come from the country over.

III. Mirror for Problems

The argument over the economics of central vs. regional distribution goes on and on. But almost everyone admits that the regional magnet is working strongly now.

What impact does a mart such as Dallas have on the industry?

The exhibitor-whether he is manufacturer or wholesaler-finds the major plus is the chance of more business. Crow reports that about half of the Trade Mart's tenants had never exhibited in Dallas before. Savs William Jackson, distributor representing several lines in the Homefurnishings Mart, "This market is the most lucrative thing that ever happened to the furniture industry here." A showroom in the Decorative Center echoes him. Just by being there, the showrooms are



Beauty with brawn! This jaunty all-plywood Lyman 19-foot runabout is an outstanding example of the hundreds of thousands of fine family craft responsible for today's boating boom. The gracefully contoured clinker-built-with-plywood hull gives flashing acceleration and sports car maneuverability—plus stout, seaworthy construction that means extra safety when the going gets rough. Exterior plywood helps builders like Lyman turn out boats that combine style and quality without the penalty of a high price tag.



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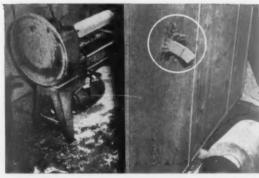
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Saved: one life, thanks to this low cost fir plywood safety screen at Douglas Aircraft, California, which stopped a part hurled from a fast-spinning lathe only a few inches from a workman's head. Light weight plywood screens had been ordered in place by plant safety engineers as a precaution against just such accidents.

Long life, low cost! Big, easy to read overlaid plywood signs like this take the guesswork out of motoring in Washington State. They combine the strength of Exterior plywood with plastic-like fused resin-fiber surfaces. And because these signs cost less and last longer than metal, they mean big savings to taxpayers. Commercial sign manufacturers, too, who have switched to overlaid plywood report that it cuts finishing and fabrication costs, and stands up better under severe weathering and damage from vandals.

FOR MORE INFORMATION about uses shown or for basic specification literature, write:

DOUGLAS FIR PLYWOOD ASSOCIATION

-an industry-wide organization devoted to research, promotion and quality control





CHEMICAL RESEARCH shapes a world of new building products

Whatever role you play in your company's building program you will find vital interest in the latest products of creative chemistry. These chemically engineered building materials were developed to supplement the traditional ones of stone, clay, wood, metal

and glass. The Dow Building Products reported on here not only make possible a better building; through the economies they effect, they help a company (and the architect and builder as well) to build a better profit picture . . . for today and tomorrow.

Scorbord® Perimeter Insulation Pyramids Economies

...with once-in-a-lifetime investment

Have new building plans got you thinking in circles? If one problem concerns heating costs, take quick inventory of the benefits of adequate perimeter insulation.

No other step in construction is so final as the foundation. Its high performance and sustained efficiency are possible only by use of proper materials and methods of installation in the original construction.

Dow's new building product, Scorbord†, was designed especially for the insulation of foundations and perimeter heating systems. Scorbord perimeter insulation helps keep any building warm, dry and snug in addition to providing double savings. The first saving: installation. The ease of fitting and installing Scorbord makes this insulation competitive in cost with other types which offer far less quality. Secondly, the high insulating properties of Scorbord coupled with the maintenance-free service it provides result in lower fuel and repair costs for the life of the structure!

Here's why Scorbord figures in more and more building plans. Scorbord is made of rigid polystyrene foam and has superb insulating qualities which are derived from its cellular structure. Millions of separate tiny cells create pockets of "dead" air space offering low heat conductivity and permanent resistance to water and water vapor. Scorbord insulation is chemically inert—gives extreme resistance to rot, mold and decay. Scorbord comes in easy-to-handle boards, 2' x 8', that are pre-scored. Your builder just snaps off to the required width for easy, low-cost installation.

That's the score on Scorbord. It typifies a new breed of building materials that answer age-old building problems and stimulate new structural ideas. For complete details write to Dow.





ROOFMATE* goes up faster, stays down longer

Business men building for the future are intrigued by the long-range economies achieved with Roofmate. Roofmate is a new roofing insulation board, developed by Dow for built-up roofs, which forms its own moisture barrier. Installed by conventional techniques, it reduces vapor build-up in the roof, minimizing "blistering", repair costs caused by leaks, and roof deterioration. Because Roofmate is lightweight, handling and labor costs are reduced and the dead weight of the roof is held to a minimum.

*TRADEMARK OF THE DOW CHEMICAL COMPANY



Zero temperatures at near-zero costs maintained with STYROFOAM®

Everyday insulating problem: maintain constant near-zero temperatures either on wheels or in warehouses. Problem solved with Styrofoam. For hundreds of users it has put insulation problems "on ice"—and with real longrange economy. Installed costs are

lower because lightweight Styrofoam is easily handled and can be put in place quickly. Operating costs are lower because Styrofoam, expanded polystyrene, provides low heat transfer with permanent resistance to water and water vapor penetration.



SARALOY® 400 FLASHING

Conforms to most contours, adheres to common building materials, can be fitted right on the job site. Keeps out water and weather long after expansion and contraction have destroyed most ordinary flashings.



POLYFILM®

Another Dow Building Product with a list of uses as ever-expanding as the builder's growing needs. Especially suited for temporary enclosure and moisture barrier-application. Available in easy-to-use box.

THIS REPORT OUTLINES only a few facts about Dow's newest building products. For information on any of the products discussed here, write today to: THE DOW CHEMICAL COMPANY, Midland, Michigan, Plastics Sales Dept. 1502AF7-25.

Chemically engineered building products • industrial molding materials coatings and paint materials • packaging materials

THE DOW CHEMICAL COMPANY, Midland, Michigan







Food Service Will Have 315,000 Guests On Its 40th Birthday

In fact, every day during this 40th year of its life, United Food serves more than 315,000 folks at work—from steel workers to bankers. In cafeterias, executive dining rooms and motorized canteens, United looks out for the health, morale, and efficiency of America at work. It also looks out for financial welfare of its clients—and can do so for you.

Here's How! We've put much of our experience in printed form. A request on your letterhead will bring you any of the following: a. "Plan Food Service When You Build"; b. "Getting Good Food Service"; c. "What Food Service Should Cost You".

We will also include the United Food Service "Clinic" form that will enable you to make a really "experienced" analysis of your own food service facilities.

United Food Management Services, Inc. 7016 Euclid Ave. • Cleveland 3, 0. • Dept C-71 1919 • Our 40th Year • 1959

Please send book	let (a) (b) (c) "Clinic" to:
Name	Title
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Address	
City	ZoneState

attracting customers who had never seen the higher-priced lines before.

• New Problems—But the market makes the manufacturer work harder, says James E. Hargadon, manufacturers' representative.

Many manufacturers, too, protest the added cost as the new markets spring up. One big manufacturer says that, with some 1,500 dealers, he has to reach 10% of them to make a regional showroom pay.

Nevertheless, the regional showroom can solve a major problem: high transportation costs. A manufacturer can set up his own warehouse at or near a regional market.

For the retailer, a good market close at hand cuts down traveling costs to the markets. But for him, as for the manufacturer, the market brings more competition. Other dealers have the same access to the merchandise he has.

• Revolution—In the small, but important, segment of the industry that sells through decorators, the showroom is stirring up a tempest.

Take the case of one of these representatives in Dallas' Decorative Center. Before the center opened, he sold one of the country's top lines, in his own home, out of a catalogue. But competing lines that moved into the center had too big an edge, and he had to join in.

Or take the case of the dealer with a decorating department. He carries the furniture in stock, offers an expensive service. For this service, he adds the full markup. Along comes the manufacturer or wholesale showroom. Immediately the dealer suspects that the showroom will bypass the retailer. Or, if it doesn't, the decorator may well be content with a lower markup because he has no overhead, no stock

Individual decorators fought the center. Most of the showrooms are operated by a distributor, who must make a profit. Decorators could get a better price by buying out of a catalogue, direct from the manufacturer.

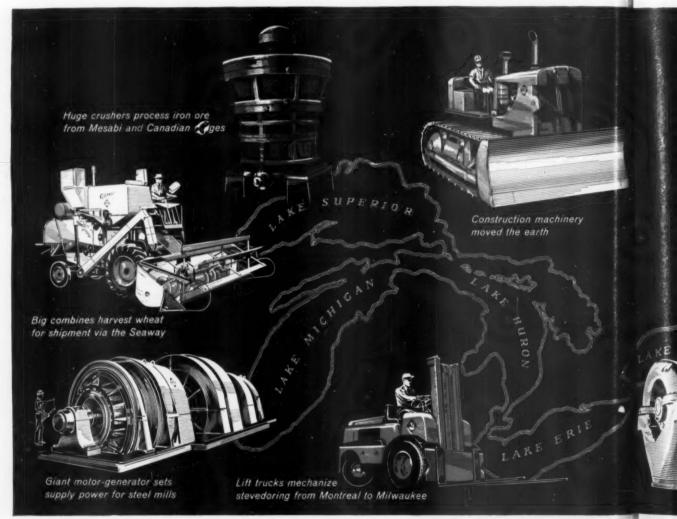
• Department Store Woes—A conglomeration of showrooms in one spot, such as the center offers, merely intensifies some of the issues that have been growing broadly in the distribution of high-priced lines for some years. More and more, these lines are going the showroom route.

The department store in many cases has lost interest in stocking lines that move too slowly to pay their way. Even some of the top furniture stores have thrown in the towel. The showroom provides these lines with an outlet.

The extent to which department stores have reneged on expensive lines showed up in an article in the April issue of Stores, published by National



St. Lawrence Seaway...story of Al



The long-awaited St. Lawrence Seaway is now open — an historic achievement by men of vision, courage and skill in both the United States and Canada. The grain of the Dakotas and Saskatchewan, the factories of the lake states and

provinces are nearer markets all over the world. Allis-Chalmers products are in use over the entire length of the Seaway, serving business, industry and agriculture of both nations. Allis-Chalmers, Milwaukee 1, Wisconsin.

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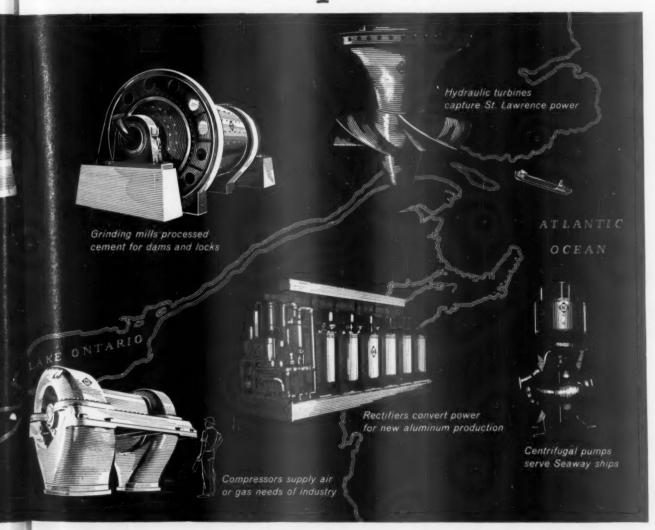
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ALLIS-CHALMERS

Atomic Energy Division • Construction Machinery Division • Engine-Material Handling Division • Farm Equipment Division • General Products Division • Hydraulic Division • Industrial Equipment Division Power Equipment Division • Allis-Chalmers International Division • Defense Products Division

fAllis-Chalmers products at work



Dramatic as it is, the St. Lawrence Seaway spotlights only part of Allis-Chalmers partnership with industry. The wide range of our products is unique in all America . . . motors from 1 to 120,000 horsepower . . . pumps that handle from 10 gallons to 2 million gallons per minute . . . rock crushers that gobble boulders up to 5 feet

wide . . . tractors for family-size farms or multimillion-yard earth-moving projects . . . electrical generating equipment (diesel, hydraulic, steam or atomic-powered) . . . and hundreds of others. An interesting new full-color booklet that tells more about our company is now available. We invite you to send for it.





Retail Merchants Assn. It found that in many cases wholesale showrooms are taking up to 50% of department store sales for better furniture. To reclaim . this business, the article suggests:

· That department stores lower their traditional 50% markon.

· That stores use the showrooms -as an extension of their own selling floors.

· That stores add decorator departments if they don't have them.

• New Customer-The first suggestion -to lower markups-sounds like heresy to many retail ears. But discount houses have indicated more than a passing interest in selling lower- and mediumpriced lines. What works for lowerand middle-priced goods could conceivably sell at the higher end.

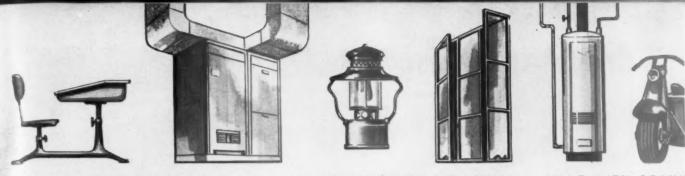
The industry is uncomfortably aware that it has not solved this particular problem. "Manufacturers have got to control showroom selling," one retailer warns. But decorators, at least, are beginning to realize that the showroom may prove more of a boon than a bane. Some that squawked the loudest when the Decorative Center opened are its most frequent customers, one exhibitor comments.

IV. Fair, With Showers

Right now, for all the unsettled problems, the furniture industry is promising itself a banner year. Seidman & Seidman, accountants, reports that new orders were 22% ahead for the first five months compared with the same 1958 period; that shipments were up Retail sales of furniture and home furnishings stores for the first four months were nearly \$3.6-billion, against \$3.4-billion the year before, on a seasonally adjusted basis. Some Grand Rapids manufacturers reported business at the June market at "an all-time high." The industry thinks the growing market of second-home buyers (BW-May23'59,p77) portends well for its

end of the business.

· Clouds-Nevertheless, the industry is far from smug. Some had expected this year's gains to be higher. Profits continue to shrink. Manufacturers are moving in various directions to improve the picture. Big Bassett Furniture Industries announced at the June Chicago market a major overhaul of its sales organization to centralize its forces. Baumritter has worked out a decorating kit, which allows a consumer to see just how her room will look when it's filled with Ethan Allen furniture, to increase selling efficiency on the retail floor. Kroehler Mfg. Co. jolted the industry by announcing price cuts in June, resulting, it said, from production efficiencies. Some companies followed suit-though most look for rising costs and prices. END



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In Marketing

Discretionary Goods Hold Up Best In Recession-Time Store Sales

How do sales of various kinds of consumer merchandise react in a recession? The National Industrial Conference Board studied sales patterns during the three postwar recessions and found marked differences among

categories of department store goods.

Some of the results were surprising. For example, such lines as sporting goods, cameras, toilet articles and drug sundries, silverware, and jewelry are considered discretionary—things the consumer doesn't have to buy at a given moment—yet they all showed strong sales gains during economic downturns. Home furnishings, furniture, and major appliances were among the groups that were hit hardest by recessions.

These trends, NICB found, don't reverse themselves in recovery from a recession. The things that sell best during the recession continue to gain in sales, while the groups most adversely affected come back more slug-

gishly.

Long-term growth patterns, in fact, seem to follow the sales performance during recessions rather than in good times. "This similarity suggests," says Fabian Linden of NICB, "that the products that are of increasing importance in the pattern of consumer demand continue relatively strong in periods of contraction, while merchandise lines that are declining in consumer preference tend to be most adversely affected."

The study also shows that bargain basement sales suffer more than those of the upstairs departments during a recession. This could mean that people don't downgrade their buying during a recession, says NICB. But it's more likely to mean that the lower-income groups are

most pinched by bad times.

Contest Managers Find What People Want Most—It's Prizes in Cold Cash

Bruce, Richards Corp., a direct mail house that specializes in running contests and judging them, will soon publish its profile of the American contestant. The profile has been drawn from material gathered in a series of

contestant samplings by the company.

It finds that the typical contestant is a housewife more than 30 years old. She's a veteran contestant who enters many contests at a time, submits several entries in each. She prefers her contests short. Completing jingles and the sweepstakes type of contest (where no skill is involved) appeal to her most.

What is she after? Cash far outstrips all other prizes as a contest lure. Barring that, she wants to win a house, merchandise, or stocks and bonds. Animals and "all bills

paid" leave her cold.

While only 20% of the women object to buying the

product in order to enter the contest, their contest product loyalty seems lukewarm. When asked if they continued to use the contest product, almost 80% responded with an evasive "sometimes."

What don't the ladies like about contests? Difficulty in finding entry blanks and lack of publicity about win-

ners got the most complaints.

Perforated Paper Is Latest Feature For the Mild Menthol Cigarettes

To follow shifts in smoking tastes and counteract concern over health, cigarette manufacturers are concentrating on the hot-selling, cool-smoking mild menthol group of brands. Three developments came last week:

 P. Lorillard Co. announced that its new brand, called Spring, will be test-marketed in Philadelphia and

Providence.

· Philip Morris, Inc., prepared to market its new

Alpine on a national scale.

R. J. Reynolds Tobacco Co. launched splashy advertising in newspaper and radio-TV for its revised Salem.

Each maker bragged about its filter. Salem's is "modern." Lorillard's "honeycomb" filter is "composed of a maze-like network of sharply crimped fibers which provide myriads of efficient smoke baffles." Alpine gives smokers "a pure cellulose acetate filter, the longest filter offered to consumers yet."

All three are lightly mentholated. Salem claims it's "menthol fresh." Alpine touts its "light touch of men-

thol." Spring contains a "wisp of menthol."

All three are pushing a new feature—minutely perforated paper, which promises to further insulate the smoker from direct contact with the products of burning tobacco. Variously termed "high porosity" or "air conditioned," the papers purport to ventilate the cigarettes so as to take in fresh air and allow heat—but not smoke or flavor—to escape.

These papers may run into competition from a do-ityourself gadget marketed by Louis Marx & Co. of New York. Marx' Ventar is a holder equipped with a ring of tiny claws that enables the smoker to puncture his own

cigarettes.

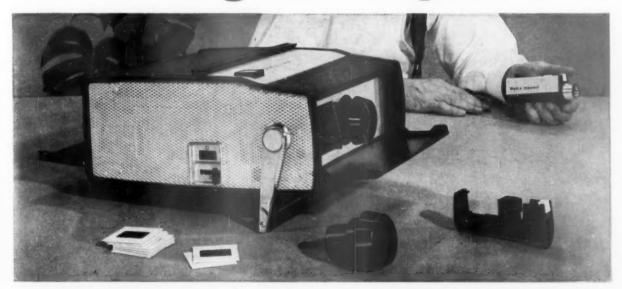
Marketing Briefs

McCall's will join the parade of consumer magazines now offering Western editions with an 11-state edition beginning with its November issue (BW-Jun.6'59,p126). It guarantees a circulation of 850,000 for the edition.

Fiber Industries, Inc., will accelerate by a year production and marketing of Teron—a polyester fiber similar to Dacron—under a licensing agreement concluded with du Pont. Du Pont controls U.S. sales of Dacron-type fibers under a patent that doesn't expire until mid-1961. Fiber Industries is a jointly held subsidiary of Celanese Corp. of America and Britain's Imperial Chemical Industries, Ltd., which has been selling a Dacron-type fiber outside the U.S.



Handsome and Hardworking Plexiglas...Implex



for Kelvinator...PLEXIGLAS® acrylic plastic provides both beauty and strength for the handsome control panel on 1959 automatic clothes dryers. Pushbutton panel, backlighted Cycle-Vu window panel and rotary dial behind window are all made of PLEXIGLAS.

for Bell & Howell... Tough new IMPLEX® high-impact acrylic plastic gives outstanding strength and resistance to staining in components of "Explorer" slide projectors. Lens barrel container, and housing of Point-A-Ray remote control unit, are molded of IMPLEX.

for you...PLEXIGLAS and IMPLEX may be just what you need to give your products added sales appeal. Our design staff and technical representatives will be glad to tell you about these Rohm & Haas molding materials.



Chemicals for Industry

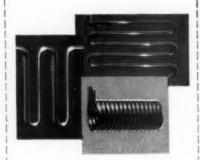
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Copper Extrusions



Dimensional Tubing



Power Cable



Building Wire and Cable



High Frequency Cable



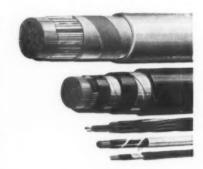
Condenser and Heat Exchanger Tube



Magnet Wire



Copper Water Tube



Telephone Wire and Cable

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Making copper products serve you better is our business. Industries that rely on copper to help supply electricity or build products for your comfort and convenience know Phelps Dodge Copper Products.

We're the manufacturing member of a famous U. S. "Mine to Market" family of miners, refiners and fabricators of copper with a reputation for making lasting quality a first consideration.

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INTERNATIONAL OUTLOOK

BUSINESS WEEK JULY 25, 1959



The Geneva foreign ministers conference is again deadlocked on the Berlin issue. This time, the talks could break down completely—with the West refusing to continue a fruitless negotiation.

At midweek, though, it looked as if the Western foreign ministers would sit still long enough for Vice-Pres. Nixon to discuss matters with Premier Khrushchev. After Nixon opens the U.S. Exhibition in Moscow Friday, he expects to have some time with Khrushchev.

The Soviet position at Geneva has hardened since the diplomats returned from their recess almost two weeks ago.

Foreign Minister Gromyko has refused to guarantee that Moscow will still recognize Western rights in Berlin-at the end of, say, 18 months-if an interim arrangement is worked out now. This is where the first Geneva session bogged down, after the West had offered several concessions-on condition of such a guarantee (BW-Jan.27'59,p28).

Moreover, Gromyko now insists that during any interim period, there must be a joint German commission—representing West and East Germany equally-to discuss the entire German problem. If the West agreed to this, we would be giving virtually full recognition to the East German regime.

It's possible that Nixon can get Khrushchev to soften the Soviet stand on Berlin. The Vice-President will carry word that Pres. Eisenhower is ready to risk a real showdown rather than accept the terms Gromyko now is offering. At the same time, Nixon may hint that Eisenhower is ready to make a shift in Washington's policy on U. S.-Soviet trade.

If Khrushchev stands pat, you can look for the Geneva conference to collapse. Then, there wouldn't be much point in a summit meeting.

Assuming the worst, it's unlikely that Khrushchev will push things too far in Berlin. Of course, he might carry out his threat to sign a separate peace treaty with East Germany, giving the East Germans authority over the access controls in Berlin. But, it's hard to imagine Khrushchev running the risk of another blockade, such as that in 1948-49.

Fidel Castro is fastening a one-man rule on Cuba. That's why he bounced Pres. Urrutia, said he was resigning as Premier, then arranged for a mass demonstration in Havana this Sunday.

Chances are that Castro will be running Cuba for some time. To be sure, there are dissident groups in the country, even within his own 26th of July movement. But there's no sign of a strong, unified anti-Castro organization.

So, it's hardly worth speculating today about how long Castro will last. The real question is: Where is he heading? U.S. officials wish they knew the answer to this question. And so do U.S. companies with business interests in Cuba.

Washington hasn't been really alarmed—at least not yet—about Communist influence around Castro. The State Dept. has focused its attention on the immediate damage Castro has done to the Cuban economy with his expropriation policies.

In talks with Castro, U.S. Ambassador Bonsal has been hammering on one point: Cuba needs U.S. and other foreign investments if it is to have 105

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK JULY 25, 1959 a healthy economy. Apparently Castro has been getting the same advice from Felipe Pazos, head of Cuba's central bank.

In Havana at midweek, some American observers had a feeling that the peak of the revolutionary fever will be reached this Sunday, the first anniversary of Castro's revolution against Batista. These observers even see a chance that Castro soon will face the country's real problems, which include serious unemployment.

Some American businessmen in Havana share this feeling. Two or three U.S. companies now are moving ahead with expansion plans in Cuba. Officials are gambling that the worst is over.

Castro's moves to consolidate his power have roused mixed feelings in South America.

On the one hand, he is viewed as Cuba's new dictator—and, from that angle, he is distasteful. Yet, he is admired for the way he has made headlines in the U.S. for Latin America.

This is expected—indirectly—to strengthen the long-standing Latin American campaign to get more attention and more economic cooperation from Washington.

It's hard to tell which way the wind is blowing in Iraq. A few days ago in Baghdad, Premier Kassem put at least two Iraqi Communists into his cabinet. This week, he has ordered his army to stamp out a Communist uprising in Kirkuk, a key city in the oil region of northeastern Iraq.

The Kirkuk business apparently started when Kurdish tribesmen turned on Turcoman townsmen. Then the local Communists got behind the Kurds, tried to take over the city.

Moscow might have been behind the uprising in Kirkuk. Or local Communists in Kirkuk might have swung in on their own.

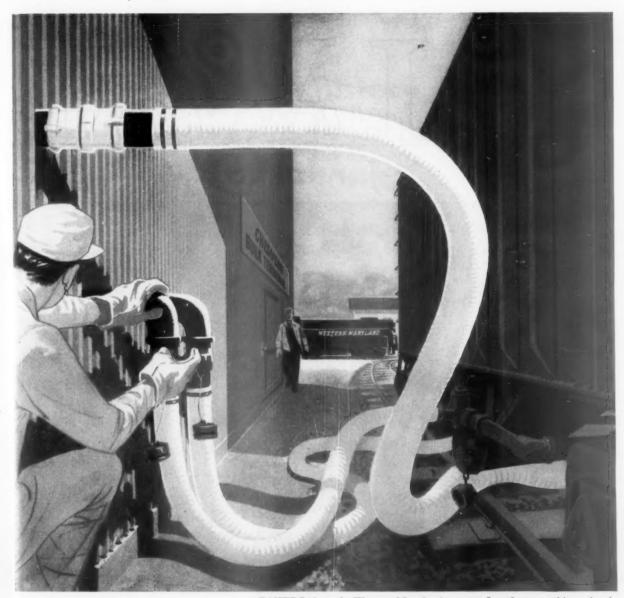
In any case, this latest Communist challenge to Kassem's authority has hurt the Soviet cause in Iraq. Kassem seems determined to maintain some kind of independence for his country, even though he has no love for the West.

There are new opportunities in Spain for U.S. trade and investment now that Madrid has launched its economic reform program (BW—Jun.20 '59,p148).

Under the new program, Spain has devalued the peseta to 60 to the dollar, joined the Organization for European Economic Cooperation, dropped some of its trade barriers, and liberalized its laws covering foreign investment. To help the Spanish economy over the transition bumps, Madrid has a promise of \$425-million in financial aid—from the International Monetary Fund, the U.S. government, OEEC, and a group of private U.S. banks.

Spanish officials don't expect a sudden spurt of private foreign investment. They are figuring on about \$25-million in new money over the next 12 months—most of it for oil exploration. Several U.S. oil companies are dickering with Madrid for concessions in Spain and the Spanish Sahara.

Contants copyrighted under the general copyright on the July 25, 1959, issue—Business Wook, 330 W. 42nd \$1... New York, N. Y.



BAKERS along the Western Maryland now get flour faster-at big savings!

How the Western Maryland helps bakers slice bread costs

A completely new system of flour handling is now cutting costs for bakers in eastern states.

Heart of the system is a great new public bulk flour warehouse in Baltimore – the first of its kind in the country. Here all flour is blown through pneumatic tubes – from special air-slide hopper cars into large enclosed bins.

From this new storage center flour goes swiftly in airtight hopper trucks to bakers in the surrounding 4-state area. Bin-to-truck and truck-to-bakery — all handling is pneumatic.

Gone is the cost of handling bags over and over again — and the cost of the bags themselves. Savings run as high as 21¢ per hundredweight! And with flour available so quickly nearby, bakers can now eliminate

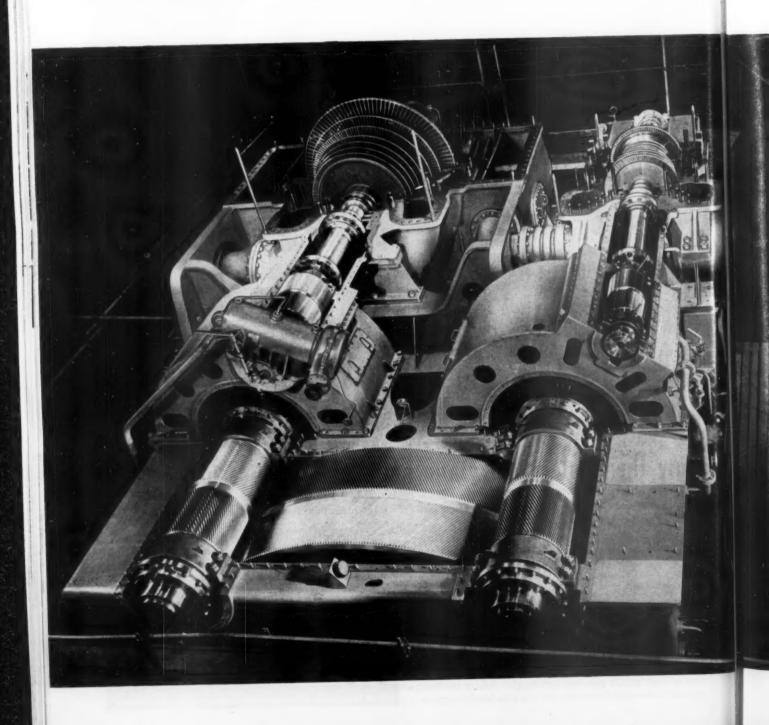
large plant flour inventories and release valuable floor space.

In the speedy development of this money-saving flour operation, Western Maryland Railway people have helped importantly—through their close acquaintance with bakers in the area.

As with many new, progressive distribution methods, this modern railroad was in at the beginning.

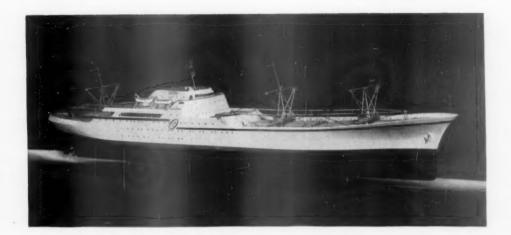


DE LAWAII



New era in maritime history opens with launching of N.S. Savannah

DE LAVAL propulsion units to drive new vessel



With the launching of the world's first nuclear merchant vessel, the N.S. Savannah on July 21, 1959, a new era in maritime history is begun.

De Laval has played an important part in the design and construction of the machinery for this nuclear ship which was designed by George G. Sharp, Inc., and built by the New York Shipbuilding Corporation. The Babcock & Wilcox Company were the prime contractors for the nuclear propulsion system.

This achievement is another first for De Laval, long a leader in the design and manufacture of propulsion machinery for the maritime industry.

In other industries — steel, refineries, chemical processes, power and others, dependability and precision manufacture have made the name De Laval synonymous with quality for over half a century.





How do you air condition an office building which, for practical reasons, cannot be done as a single project? The owners of the Cravens Building in Oklahoma City found a Carrier Multi-Weathermaker* System the ideal solution. By means of a unique Master Plan, wiring and piping for the whole system was installed back in 1949 - a farsighted move that resulted in large savings. Then as leases expired and floors became available, Carrier self-contained package units were added. Today

-ten years and twelve installations later-tenants enjoy complete climate control from top to bottom! Among many advantages was the lower initial outlay of doing a floor at a time, lower operating costs (since Weathermakers not needed can be turned off), and no more total investment than an all-at-once system would require. If this sounds like the answer to your air conditioning problem, call the Carrier dealer listed in the Yellow Pages. Or write Carrier Corporation, Syracuse 1, N. Y.

*Reg. U.S. Pat. Off.

Carrier

How Democratic Are Unions?

A new analysis finds that most union constitutions are "democratic in intent," but have "serious flaws" when it comes to members' rights in union affairs.

The report is full of ammunition for proponents of stronger Congressional curbs on labor

But author Leo Bromwich believes the job of creating a "free internal life" is up to the unions themselves.

How far should the government go in regulating unions? Are the internal affairs of a union sacrosanct like those

of a private country club?

Some devastating material for answers to these hotly debated questions turned up last week in a Fund for the Republic report, an analysis of 70 unions by Leo Bromwich. An attorney and a member of the research staff of the University of California's Institute of Industrial Relations, Bromwich finds that most union constitutions are "democratic in intent," but have "serious flaws" in their procedural safeguards for democratic participation by members in union affairs.

His report contains considerable dynamite for those who want curbs on unions. It is all the more explosive because it comes from an unexpected source, not one considered hostile to labor. In short, though he hems-and-haws here and there, Bromwich finds unions undemocratic in many ways. Thus, his report provides ammunition for congressmen seeking to regulate unions more closely. It backs up their contention that legislation is needed to protect the individual rights of union

nembers.

• Up to the Unions—Bromwich, surprisingly, wouldn't agree. While he does not discuss the pros and cons of such legislation, he believes that the task of creating a "free internal life" is up to the unions. "The one urgent task of the labor movement today," he says, "is to deepen and extend the democratic guarantees it has provided for its members." He also cites the fact that "there are unions that have taken important steps along the road to insuring democratic functioning through the authority of a constitution."

Nonetheless, the data assembled and analyzed by Bromwich leave the reader dubious about prospects of internal democratic reform among the unions. In his discussion of discipline and due process, for example, Bromwich cites approvingly the public review board set up by the United Auto Workers as

a court of final appeal for members on trial within the union. Yet, the small Upholsterers International Union is the only other union with an independent public review system.

• Who Can Join—Bromwich plunges into the problems of union democracy with the charge that the union's power to control admissions "truncates democracy before it even begins by excluding this or that group from membership." Apprenticeship programs and other methods of controlling the admission of members are widespread among craft unions. Industrial unions normally do not have like powers.

Apprenticeship rules, says Bromwich, frequently cloak undemocratic practices. He sees two problems as particularly vexing: first, the rules are fixed "with an eye to the maximum security of journeymen rather than the skill requirements of a particular trade," and this is done "while excluding the apprentice from the right to participate in decisions which affect his work."

A fixed ratio between the number of journeymen and apprentices, the screening of applicants by the local union, and the setting of time of service requirements are the methods used by most craft unions to regulate the number of new workers in their respective crafts. Where apprentices are required to serve long periods of time before becoming journeymen, they remain second-class citizens in their unions as holders of work permits instead of membership cards.

Second, Bromwich finds that there is "no method of quick appeal from an apprenticeship committee's decision." Reviews in some cases have taken one to

five years.

Screening of applicants for apprenticeship programs, or for membership, enables the unions to keep Negroes or members of other minority groups out of the union. A handful of unions—the Brotherhood of Locomotive Firemen & Enginemen, the Brotherhood of Locomotive Engineers, the order of Railway Conductors, and the Brother-

hood of Railroad Trainmen—have constitutional clauses restricting membership on grounds of race and color. But, as Bromwich points out, the same effect is often achieved through requirements for "fraternal" approval of an applicant for membership—in many craft unions prospective members can be blackballed. Nine unions in Bromwich's sample, representing over 2-million workers, have requirements of this sort.

• The Reins of Power—Bromwich's report quickly spot-lights the figure that holds the reins of power in the unions: "In most American unions the president

is all-powerful . . .

Some unions seek to avoid this centralization of power by placing restraints on the union president through such clauses as those in the International Chemical Workers' constitution that empower the executive board with both administrative and review functions. But in many instances, Bromwich claims, "the check of the executive board is not too meaningful."

In theory, ultimate authority in most unions rests with the convention, which, as Bromwich points out, "is crucial to union democracy." All the unions in this sample designate it as the supreme body of the organization. Most unions nominate and elect officers at conventions. But, as many have noted, most conventions are kept well in hand by the union administration and its salaried staff, or "porkchoppers."

The convention, frequently, offers the rank-and-file through their representatives their sole chance to check on their leadership. The lapse of time between conventions can be crucial—the longer the time span the more likely the possibility of a minority consolidating its control over a union. Bromwich feels "any interval longer than two years deserves careful scrutiny." He is disturbed to find that 34 out of his sample of 70 unions hold conventions at intervals exceeding two years.

Much of the president's power, Bromwich finds, is derived from his authority "to appoint convention committees in some cases, and to preside over the convention in others." This, he says, "strengthens the tendency toward a concentration of executive power." In many instances, the union president's power to appoint committees to handle resolutions and credentials enables him or his henchmen to screen proposals before the convention, and to select delegates to be seated.

• Discipline—"The presence of good procedure does not guarantee justice, nor is its absence proof of minority



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control," says Bromwich. In unions such as the Typographers, Auto Workers, and Upholsterers, there is, he says, "a sensitivity of procedural rights in diciplinary cases." But in a significant number of unions, careful disciplinary procedures are not set forth.

Out of the sample of 70 unions, 26 give the local executive board jurisdiction over the trial of union members. Opponents of the local administration, Bromwich says, are likely to get short shrift before a trial committee controlled by the administration. The "crimes" with which a member may be charged are often deliberately vague—for instance, acting "to create dissension . . . or against the interest and harmony" of the union is grounds for expulsion by the Carpenters.

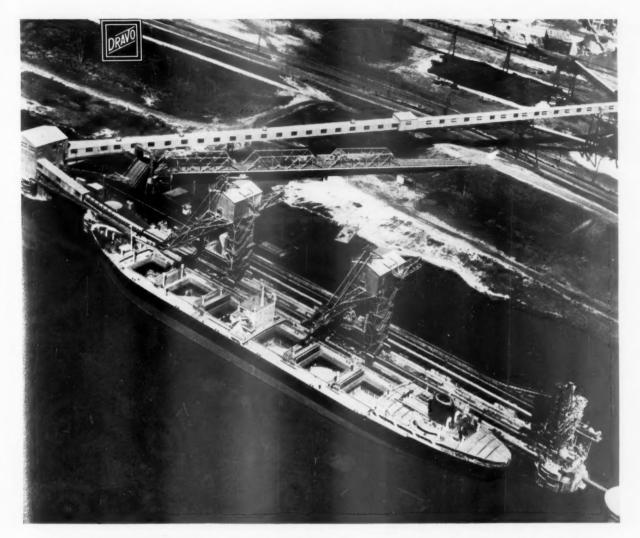
The same carelessness of definition often applies in the suspension of a local union. This, Bromwich sees as "one of the strongest powers the international administration has." And, as the McClellan committee frequently uncovered, suspension and administrative receivership is a method widely used by racketeers to control locals.

As often as not, Bromwich finds, "the suspension of the local is a one-man show, accomplished on the order of the international president." In addition, the majority of the unions in Bromwich's sample "set no time limits at all" on the duration of the suspension and "leave the question up to the officers in charge . . ."

• One-Party Press—In almost all the unions that Bromwich examined, the press is under control of the incumbent administration, and its use by the membership is hedged in by numerous restrictions. Only a handful of unions, the Typographers among them, require that the official journal print opposing views. More than half the union constitutions surveyed by Bromwich contained regulations covering libel and slander that "seriously hamper, if not destroy, this kind of discussion."

Bromwich also found many "extreme" constitutional provisions prohibiting any kind of organized activity within the unions. The International Brotherhood of Electrical Workers, for instance, punishes anyone attending a meeting on union affairs not authorized by the local involved. The International Ladies' Garment Workers' Union prohibits the organization of any group without its first filing an application with the union's executive board.

So, a sword of Damocles hangs over the head of the union member who dares to oppose the powers that be. This potential threat, says Bromwich, "is sharpened by the offenders's knowledge that he may be tried by the very group he is attacking. This . . means freedom of debate is normally circumscribed in the labor movement." END



Unusual dock and unloaders handle both ships and barges at new Baton Rouge port facility

This new marine terminal at Burnside, Louisiana, is the largest bulk cargo facility in the Gulf Coast area. It is the latest step by the Greater Baton Rouge Port Commission to make that city a major port.

Because the facility was planned for ocean-going ore ships as well as river barges, initial studies indicated costly unloading equipment and dock construction. Designs later were approved, however, for two unloaders which combine operating features of ship unloaders with the lighter weight and lower cost of barge unloaders. These special machines (1) reduced cost of unloading equipment; (2) permitted use of economical, 860-foot long, cellular, sheet pile dock.

Result: The facility can handle the largest ore ships now in use; can load and unload barges or ships; can transfer 2400 tons per hour to storage. The public terminal, operated by Ramsay, Scarlett & Co., Inc., is expected to handle more than 150 ships and 1800 barges during 1959.

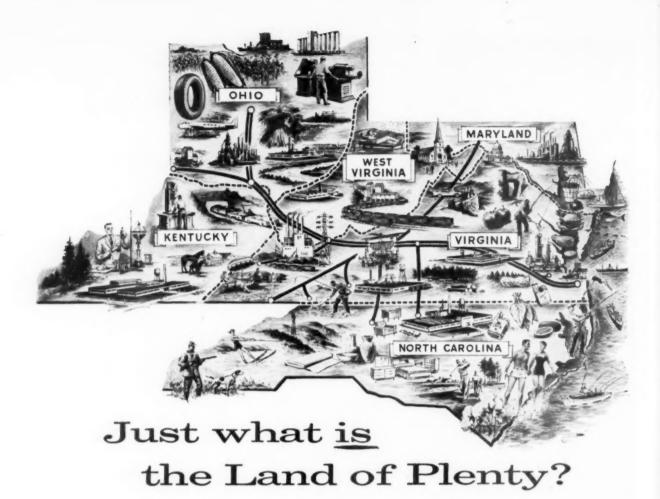
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In Labor

Cost of L	iving:	What	's Hap	ening	to It
	Total Cost of Living	1947-49 = 100			
		Food	Clothing	Housing	
				Total	Rent Only
June, 1951	110.8	112.3	106.6	112.3	112.7
June, 1952	113.4	114.6	105.6	114.0	117.6
June, 1953	114.5	113.7	104.6	117.4	123.3
June, 1954	115.1	113.8	104.2	118.9	128.3
June, 1955	114.4	111.3	103.2	119.7	130.4
June, 1956	116.2	113.2	104.8	121_4	132.5
June, 1957	120.2	116.2	106.6	125.5	135.0
June, 1958	123.7	121.6	106.7	127.8	137.7
July	123.9	121.7	106.7	127.7	137.8
August	123.7	120.7	106.6	127.9	138.
September	123.7	120.3	107.1	127.9	138.2
October	123.7	119.7	107.3	127.9	138.3
November	123.9	119.4	107.7	128.0	138.
December	123.7	118.7	107.5	128.2	138.7
January, 1959	123.8	119.0	106.7	128.2	138.8
February .	123.7	118.2	106.7	128.5	139.
March	123.7	117.1	107.0	128.7	139.
April	123.9	117.6	107.0	128.7	139.
May	124.0	117.7	107.3	128.8	139.
June, 1959	124.5	118.9	107.3	128.9	139.
Data: Dept. of Labor, Bureau of Labor Statistics.					Bausmess wei

Another Sharp Jump in Living Costs n June Was Paced by Food Prices

The government's monthly cost-of-living index rose harply in mid-June to 124.5% of 1947-49 average prices, nother new high. The increase from May's 124.0% was he steepest since March, 1958.

Although the index showed a general upturn, the harpness of the c-of-l increase is largely due to higher food costs; the food index rose from May's 117.7% to 118.9% (table).

Housing and apparel figures showed little change. Transportation, medical care, personal care, reading and recreation, and other index factors rose 0.3-point or 0.4-point after months of relative stability.

UAW Protests as Construction Workers Pass Pickets to Build Kohler Plant

Construction work on a \$3-million plant building for the Kohler Co., in Kohler, Wis., is creating addedtension in the United Auto Workers' five-year-old strike against the company, now operating normally.

The building is in the plant area being picketed by UAW. Members of AFL-CIO building trades unions are crossing the UAW lines, despite the auto union's protests.

Striking Local 833 recently called on AFL-CIO to prevail on the building tradesmen to support UAW's walkout. It warned that operating engineers, carpenters, and laborers now working on the Kohler job "are only the vanguard of union workers and others who will follow their example."

Craft union leaders in the area have had their own private dispute over whether UAW's strike lines should be observed. So far, the nays seem to prevail.

Mitchell Expects Labor Reform Law To Have Best Chance in Years

Labor reform legislation is more likely this year than in the last four or five, according to Labor Seey. James P. Mitchell. It may not satisfy those with "extremist" viewpoints—for milder or tougher curbs on labor—but it probably will be "sound and in the public interest."

Mitchell expressed "hope" for labor reform legislation as the House Committee on Education & Labor put finishing touches on a bill to be voted out late this week.

Judge 'Whittles Down' Teamsters Agent, Imposing Jail Term and Stiff Fines

Unions, properly run, are necessary today as "the only means through which ordinary workers can hope to get fair recompense for their labors," says U.S. District Judge Wilson Warlick. He believes most of the troubles and abuses in labor today are due to "leaders who have boosted themselves into exalted places to which they are not entitled."

Judge Warlick, sitting in Asheville, N. C., adds that irresponsible leaders "can always be whittled down." In a district generally regarded by unions as one of the toughest, he set out last week to "whittle down" a Teamsters business agent convicted of criminal contempt of an injunction against a boycott in an organizing dispute

Noting that it took a federal jury just 15 minutes to return guilty verdicts, the judge fined the business agent \$5,000 and sentenced him to 18 months in jail, assessed a \$50,000 fine against the international.

The verdicts are being appealed.

Union Fights for Right to Boycott Employer After Losing Election

The United Rubber Workers is asking the Supreme Court to upset a National Labor Relations Board order that bars it from picketing the O'Sullivan Rubber Corp. plant in Winchester, Va., and from urging the public not to buy O'Sullivan products.

URW struck O'Sullivan three years ago. The company resumed work with replacements. URW was decertified in an election from which strikers were barred by law. NLRB then ruled that URW, a "minority union," couldn't picket or use "do not patronize" ads against O'Sullivan.

If the high court accepts the appeal, the issue is expected to be whether a union can continue to use strike devices against an employer after decertification.



Steel umbrella large enough to cover Yankee Stadium

"The House that Ruth Built" could tear up its rain-checks if covered by a steel umbrella of this size. Instead of shielding the bleachers, however, this structure will protect Pan American jet passengers from the weather at New York International Airport.

With 4,000 tons of Bethlehem structural steel in its rugged framework, this \$8 million, elliptical-shaped structure incorporates elements of suspension bridge design. The cantilever-supported

Scale model of Pan American World Airways' new jet terminal at New York's International Airport. Architects and Engineers: Tippetts-Abbett McCarthy-Stratton; Associate Architects: Ives Turano and Gardner; Fabricator: Lehigh Structural Steel Co.; Erector: Lehigh Construction Co., General Contractor: Turner Construction Co.

canopy, to flow upward over the glassenclosed building, will project 114 ft beyond the roof-supporting columns.

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The canopy is suspended by thousands of feet of Bethlehem wire rope.
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THE MARKETS

Rx for Stock Analysis: Luck, Conceit, a Formula

Like Gilbert & Sullivan's policeman, the lot of most Wall Street security analysts is not a happy one. They labor in comparative anonymity, under constant pressure. Constant pressure to come up with new selections that customers' men can recommend to clients. This makes it difficult, even in a bull market, to keep coming up with profitable selections, and analysts are understandably reluctant to be identified with a declining stock.

Still, security analysts have never been more important than they are to-

day.

While stock analysis is far from a science, every institutional investor and most individuals depend on the analytic approach of a securities researcher who is constantly comparing figures and spot-

ting trends.

• Salesman, Too—Samuel Lee Stedman (pictures) is an exception among analysts. As the securities partner of Carl M. Loeb, Rhoades & Co., one of Wall Street's big firms, he acts as both analyst and salesman, mainly with institutions—mutual funds, pension funds, bank trust departments—and quasi-institutional investors—individuals with large portfolios. He likes to speak out in public, and is not at all reticent about naming the stocks he likes best.

Stedman can afford to crow. He has a reputation as one of Wall Street's best pickers of big winners, and isn't coy about admitting it. On his own observation that an analyst is "only as good as his last recommendation," he looks good, particularly since the bull

market resumed last year.

In January, 1958, Stedman picked a group of nine stocks-Polaroid, Diners' Club, Brunswick-Balke-Collender, Zenith. International Business Machines, Merck, Fairchild Camera & Instrument, Thiokol, Crowell-Collier-that he thought would do far better than the market averages. From January, 1958, through June, 1959, the Dow-Jones industrial average increased 48%. Stedman's selections, however, jumped 288%; every one of them outperformed the Dow-Jones by a considerable margin, in some cases quadrupling in value.
• Big Following—This spectacular performance, and the handsome showing of choices-such as Rexall, RCA, Armour, Wilson-that he has made

Stedman does not seem to mind that many investors will desert him if, and

since have won him a large following

when, he picks losers. He considers himself a fresh and provocative thinker who revels in "sticking out my neck." He does not claim to be infallible.

A glib, natural showman who exudes self-confidence, the 43-year-old Stedman gives his views on a wide variety of stocks. He is frequently called on to perform before audiences, and always provides what appear to be spontaneous

but definite opinions.

The fact is that Stedman does a great deal of painstaking preparation. He does not deny that he has been lucky, but he claims to have "34 years experience in security analysis by working twice as hard as anyone else for 17 years." Under Armand Erpf, dean of Wall Street's analysts, Loeb, Rhoades has developed as a researchoriented firm, and Stedman leans heavily on its staff. But he worked out his own definition, and formula, for evaluating "growth" stocks, and has campaigned for his particular concepts.



The key, as Stedman sees it, is compound growth. He thinks that a company must show at least a 12% increase in earnings per share a year, compounded, to be considered a growth situation; he himself considers a 15% compound as desirable. He points out that earnings compounded at 12% will mean a doubling in six years, a compound of, 15% will double every five, and a 25% compound will double in three years. He believes that companies with a high rate of compound growth should sell at much higher priceearnings multiples, and higher prices, than companies with low rates. As he puts it, "If investors are willing to pay 10 times earnings for a stock whose profits double in 10 years, then 50 times earnings is not unreasonable for a stock that doubles its earnings

• The Formula—Stedman has worked cut a formula for cutting down on the guesswork in evaluating what a stock is worth. He looks on the formula as a rough rule of thumb to be used only after a careful study of the factors that produced past earnings and those that are likely to effect future profits. If an analysis suggests that earnings may be sustained or increased, then the formula comes into play.

For example, if a company increased its net profits per share by 25% per



"People pay too much for growth stocks whose earnings compound too slowly."



"If I feel sure of a high compound, I don't bother about the timing."



"I seldom discover situations, but I have convictions about them."

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". . . companies devoted to leisure or technology have the best growth prospects, particularly those with something special to offer . . ."

(STORY on page 117)

year over the past five years, and Stedman's over-all analysis leads him to assume that this rate of growth can be maintained over the next three years, then present earnings per share will double. If, say, the company now earns just over \$3 a share, it will show about \$6 a share three years from now. If its present price-earnings multiple is 11, the stock is selling for around \$35; assuming the same price-earnings ratio, the stock will be worth over \$70 a share in three years; Stedman feels a stock compounding at 25% should sell at over 30 times earnings, which would put its price at \$180.

Stedman is not prepared to pay \$180 or even \$70 now. Apart from intangibles, the 1961 dollar may not be worth as much as the current dollar. So he applies a liberal discount of 12% on each dollar of future earnings; the 1961 dollar figures to be worth only 68¢ in terms of the 1959 dollar. Instead of being worth over \$70 a share, at 11 times or \$180 at 30 times earnings, the stock should be worth between \$53 and \$120 in 1959 dollars. Even so, this is well above present price of \$35,

and rates buying.

• Limitations—Stedman emphasizes that his formula is not fool-proof and that past growth is not always a sound guide to future prospects. Many companies are able to demonstrate a high rate of compound earnings over a specific period, then lose their momentum. Others seem fairly stable, then take off like a rocket. His formula can't determine what rate of growth can be expected; all it does is provide a clue to value if you have a good fix on a stock's earnings power.

So while Stedman finds it easy to define a growth stock as one that shows at least a 15% compound, the process of finding growth stocks that are currently undervalued depends, to a large extent, on his "feel" for a situation.

II. Technology And Leisure

There are two main areas where Stedman looks the hardest. One is in the technological field, where a company with a new process or development can leap into prominence almost overnight. The other is in what he calls the "leisure" field, which is getting an ever increasing share of the consumer dollar.

He contends that the surest bet is the company that enjoys what he calls a "sheltered" position by virtue of its product, its management, or its geoggraphy. Polaroid is his prime example. With its picture-in-a-minute camera, it has a proven product that, he feels, has not yet fully tapped its potential market. Moreover, Stedman thinks that its management is conscious of the need to improve its product, and to continue innovations in its field. "I consider Polaroid the best of the supergrowth stocks," explains Stedman, "because it marries technological development to the consumer market."

He thinks that there are other supergrowth stocks—IBM, Haloid Exerox, Ampex, Texas Instruments. Each offers something special in the way of technological advance, and each has been able to show a very high rate of compound growth. He describes them as "open end" stocks, which can be bought at any time, adding: "Of course, you can pay too much for them on a given day, but if you hold them for the long run, you are sure to come out ahead."

• Expertise—Picking stocks in the technological area demands a certain amount of expertise. Stedman says he relies on the advice of skilled technical men and his own flair for grasping the significance of their findings. He recognizes the value of research, but he is not beguiled by companies with big research programs. "Research is a cost of doing business today," he says. "It doesn't make you good if you spend but you are dead if you don't."

Stedman is by no means the only analyst to recommend Texas Instruments or IBM ("Nobody needs me to recommend IBM," he says). But he has made a name for himself by choosing little-known stocks, as well as the stocks of "problem" companies that were not generally regarded as growth candidates. He began recommending Polaroid for its "unique growth qualities" in late 1953, when it was selling for about \$50 a share. Despite his persistent campaigning, it took a considerable time to get investors interested in a company dependent on one product. He argued that the lack of direct competition should be viewed as an asset. His belief paid off. This week, Polaroid was selling at \$140 a share; since Stedman's original recommendation it has had two 50% stock dividends and a 4-for-1 split, so that anyone who bought when he first suggested it has had his capital increase over 20 times.

 Consumer Leisure—Stedman has had similar success with other issues. His notion that the consumer leisure field is ripe for growth led him to investigate the bowling industry and to recommend Brunswick-Balke-Collender and American Machine & Foundry before they had their big rise. On the technological side, he came up with Fairchild Camera, which he first recommended at \$23, and General Transistor, which was selling at the same level. This week, Fairchild sold at \$185 and General Transistor at \$90.

Stedman is not the type of analyst who, in striving for complete objectivity, refuses to buy the stocks he recommends. On the contrary, he admits to being "my own best audience," adds that "when nobody else would listen, I did."

Just the same, Stedman is aware that having a personal financial stake in a situation can color his judgment. He feels that his willingness to confess errors prevents any serious conflict.

• Mistakes—But he has a number of mistakes to learn from. In 1953, when he first picked Polaroid, he also liked Parker Pen, which was then introducing its ball point. He figured that the extensive research and promotion Parker had put into the product would pay off in increased earnings, but the stock did not perform according to his expectations. He also favored Lorillard because of its introduction of Kent filter cigarettes, but this was a case of "being too far ahead of the market."

Another Stedman selection that went sour was Smith-Corona, which he favored because it had been working on a method to feed information to computers

puters.

A current selection that has not performed as well as Stedman expected is Diners' Club. It has gone up since his first recommendation, but for most of the last 12 months, it has marked time. Many analysts think that the competition of American Express and Hilton Hotel's Carte Blanche have hurt Diners' and will put a crimp in its high compound. But he is sticking with it.

"Lucky and Good"-By and large, though, Stedman's choices have been rewarding. He has been described as "a money-making machine," and one insti-tutional man observes, "Sam is both lucky and good. I don't know how he does it, but he has the knack for recognizing values that no one else can see. Stedman himself explains that it is largely a matter of knowing what to look for, preferably a company that has healthy assets and solid growth pattern.

III. Birth of a Prophet

Stedman has been looking at stocks since 1937, when he came to Wall Street by way of Sedalia, Mo., his birthplace and Harvard's B-School. He had always been interested in the securities business and despite the fact that Wall Street was regarded as a dead end, Sted-

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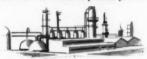
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man had no qualms. He started as a research man with Bache & Co., devoted all his time to soaking up facts and figures about a big list of securities.

This intensive research helped a great deal in the postwar period. Stedman, who served a hitch in the Army, came to Loeb, Rhoades after the war. He was one of a comparatively small number of young men in Wall Street who had well-grounded experience in security analysis. Confident that he could make big money, he began to formulate his own distinctive approach. When the boom in Wall Street started rolling, Stedman was ready for it.

• Early Bird—He was in fact one of the early prophets of the boom, basing his belief on the growth in purchasing power and the increasing stability of the economy, factors that are now taken for granted. He also recognized that there would be no serious postwar slump because "the war never really ended." This view was considered radical at the time, but its subsequent acceptance established Stedman as a provocative and independent analyst.

Stedman was not interested in merely picking an undervalued stock. He was after stocks with big growth potential, able to double or triple in value. He explains: "I swing for the fences, and occasionally I strike out. If I were after singles, my batting average would be much higher."

This desire for big winners is part of Stedman's appeal. Analysts on Wall Street are generally insecure, always seeking confirmation for their choices from other analysts. Thus, Wall Street is prone to changing fashions, and knowing what is fashionable in the market is usually profitable.

Stedman does not run with the crowd. He admits that knowing the latest fashion helps, but he sees himself as a fashion setter rather than as a follower. Stedman says that the big institutions are chiefly responsible for establishing fashions in stocks and he reasons that "if you want to make money you buy what the institutions are buying, and if you want to make a killing you buy what they will be buying."

Institutions—It's difficult to get institutions to buy off-beat stocks. As managers of other peoples' money, they are usually very cautious. But Stedman feels that institutions are becoming increasingly aware of the need for individuality because when everyone favors the same issues, they are quickly bid up to unsafe heights.

His success is making it easier to sell his ideas. At the same time, his own role is changing. Primarily, he is still an analyst who specializes in recommendations to institutions. But he has taken on, increasingly, the role of a sponsor of stocks. He himself says, "I

don't tell the management of any company what to do. But when I find a company I like, I can supply imagination and conviction in telling its story."

It is Stedman's belief that a good growth stock will do well even when the economy is in a decline. For the most part, he does not spend much time on stocks that he feels are good for only a momentary rise. These stocks, he feels, are for traders, not for institutions or for individuals who cannot devote all their time to the market. So the stocks he chooses are generally ones he sticks with.

IV. A Natural Bull

As a prophet of growth, Stedman really came into his own with the resumption of the bull market last year. In 1957, he had turned bearish, a condition he admits is foreign to his nature-he takes pride in his collection of animal sculpture, which consists mostly of bulls in various poses plus some bears all with "fatuous or benign" expressions. But the advent of Sputnik stimulated his normal optimism, convinced him that the recession and the downturn in the stock market would not be prolonged. It was at this juncture that he began advising his clients to buy. He has continued to ride the boom ever since.

Despite the present height of the market, Stedman looks for still higher prices. He feels that institutions and individuals will continue to buy stocks because the economy is in a new phase of expansion and the vast amount spent on technological developments is at the point of paying off.

• Predictions—Stedman does not rule out the possibility of a decline. He thinks a lot of stocks have been bid up too high, which makes the entire market vulnerable. But he also insists that a significant breakthrough has been achieved by investors who are prepared to pay over 40 times earnings for common stocks.

He thinks that such a multiple is reasonable for supergrowth stocks, which show a high rate of compound growth. The maintenance of this multiple, he points out, is leading other stocks to sell at higher price earnings ratios. This upgrading process is likely to become permanent because "of the law of inertia." He explains: "Once a new multiple is achieved, it is likely to remain even on stocks that don't continue to merit it."

In taking this line, Stedman is sometimes accused of indulging in "New Era" propaganda. He dismisses this charge as a misinterpretation. 'A high price earnings ratio is justifiable only in cases where a company is proving itself," he says. "That only applies in a limited number of cases." END

In the Markets

Half-Year Showing of Profits Drives Industrials to New Peak

Rosy first-half earnings reports, in some cases the best on record, sent the Dow-Jones industrial average to a new peak this week. Investors appeared confident that the third-quarter slowdown—inevitable in view of the steel strike—would not mean more than a temporary halt to the rise in profits and dividends. They resumed their buying in volume.

The latest advance was a selective one, however. Interest was concentrated on autos, electronics, steels, and chemicals, all groups that promise to show higher profits. Oils still lagged, along with copper and cement stocks, which have not yet participated fully in the new business

upsurge.

Most brokers feel that the market is headed toward even higher levels, despite the fact that high bond yields are beginning to attract more institutional buying. They pointed to the rise in short interest last month as a bullish sign; it was the first increase in short-interest figures since January.

Canada's Star Speculative Stock Is Overwhelmed by Selling Wave

One of Canada's most speculative bubbles burst this week.

Arcan Corp., Ltd., a holding company with interests in distribution and manufacturing (assets: \$1.8-million), has been for several months the most heavily traded industrial on the Toronto Stock Exchange, bid up from a low of 25¢ last year to \$8.67. Monday, a selling deluge battered the price down from \$7 to \$1.75. TSE suspended trading; at midweek, Arcan was trading unlisted at \$2 per share.

Bay Street brokers groped for an explanation of the sudden break. One said the break was the natural reaction to "over-promotion." But a more popular theory was that Philip Owen, an English promoter who had bought into Arcan last year and diversified it—with great fanfare—from a small maker of ventilation and materials handling equipment, may be unloading some of his shares. Some brokers said it looked as if Owen was bowing out completely.

Big Treasury Refunding Sets Highest Interest Rate Since '29

The Treasury Dept. this week wound up the second biggest marketing it has scheduled for this year—a refunding of \$13.5-billion in 1\frac{1}{8}\% certificates and \$473-million in 4\% notes, both due Aug. 1. Unable to sell any obliga-

tion with a maturity over five years because yields on outstanding issues are above the 4½% ceiling set by Congress, it offered investors three choices: cash, a 4½% note due in 12½ months, or a 4½% note due in 4½ years. The 4½% rates are the highest the Treasury has put on a new issue since 1929.

Fearing heavy cash-ins—the public owns \$5.8-billion of the maturing securities—and anxious to lengthen the debt, the Treasury also tacked a sweetener on the new long 4½% note. Interest on it begins July 20, instead of Aug. 1 as for the shorter note. This gives investors who took the long issue this week an extra 12 days of income return, equal to about another \$1,000 on each \$1-million of the 1½s.

Most dealers thought the 4½% rate on the short note was priced right on the market, in line with the going 4.77% equivalent on Treasury bills. But they thought the 4½% rate on the longer note was on the slim side. Even so, investors who need high current income—such as country banks—are interested in the longer note, which is in the bank maturity range of up to 5 years.

The Markets Briefs

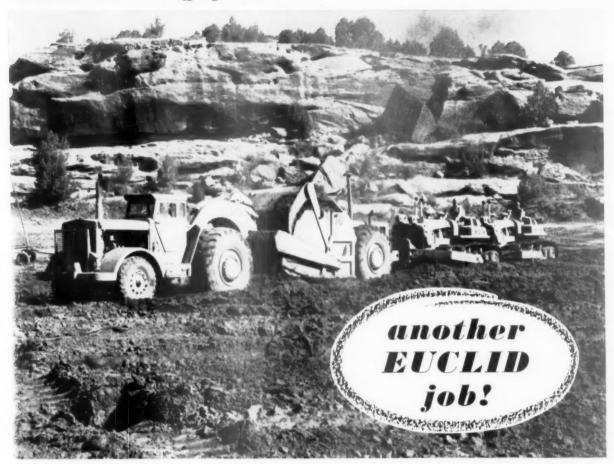
New England Telephone & Telegraph Co. announced plans for a 5-for-1 stock split. Earlier this year, AT&T, which holds a 70% interest in New England, split 3-for-1, and Pacific Tel & Tel, 89% owned by AT&T, laid plans for a 7-for-1 split. New England stock rose \$11 on the news, traded at midweek at \$200, some \$40 above its 1959 low. In addition, rumors circulated that General Telephone, AT&T's biggest competitor, shortly will split 2 for 1 and raise its dividend 10%.

In the first half of 1959, **corporate dividends** reached a record \$6-billion, up from \$5.8-billion in the first half of 1958, says the Commerce Dept. The department said the rise in dividends reflects increased payments by most non-durable goods industries.

One William Street, the \$290-million mutual fund launched by Lehman Bros. 15 months ago in the biggest investment trust underwriting in Wall Street's history, is having serious sales troubles. In its half-yearly report issued this week, the fund disclosed that it sold \$22.3-million in shares but had to buy back \$24.1-million, a net sales attrition of \$1.7-million. One William slumped badly in the second quarter, with only \$9.2-million in sales and \$13.3-million in redemptions; in the first quarter its sales had exceeded cash-ins by \$2.3-million. The fund is losing assets on cash-ins at a time when mutual fund share sales as a whole established a record of \$1.1-billion for the first six months, compared with redemptions of \$430-million.

This week, for the first time since World War I, shares of major American corporations were traded on the Paris stock exchange. The first listings, which are sponsored by the Morgan Guaranty Trust Co. and a number of French banking houses, include AT&T, General Motors, General Electric, and Ford. Requests to allow buying of U.S. stocks in France had been held up by the government until it was sure of the stability of the franc.

another big job . . .



Navajo DAM in northwestern New Mexico will be the second largest earthfill dam ever built for the U.S. Bureau of Reclamation. An important unit in the Upper Colorado River Basin Project, this four year construction job will create a lake 30 miles long and will irrigate 110,000 acres. A total of 26 million cu. yds. of compacted fill will go into the embankment . . . that's enough material to fill a train 6,500 miles long!

To move a major part of this tremendous yardage, 36 Euclids are already at work and more will be added later as work progresses. Sponsor of the three contractor joint venture, world famous Morrison-Knudsen Company, Inc., is using big "Euc" bottom-dump and rear-dump haulers, scrapers and crawler tractors. The 600 h.p. scrapers are twin-power four wheel drive machines that are well suited for the long hauls and steep grades . . . they are push loaded by Euclid Model TC-12 crawler tractors that are also powered by two engines.

For productive capacity and better return on investment, users of heavy construction equipment all over the world depend on Euclids. For big projects, like Navajo Dam, to small grading and stockpiling operations there are "Eucs" to fit the job. Have the dealer in your area arrange a demonstration or give you the facts and figures.





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Brunswick's new 200,000-sq.-ft. Automatic Pinsetter Plant in Muskegon, Michigan, is designed and engineered specifically for the ultimate in pinsetter production.

FOR AUTOMATIC PINSETTERS ONLY! ... BRUNSWICK EXPANSION CONTINUES

Another Brunswick contract awarded to Cunningham-Limp

In Michigan, Muskegon is the scene of another major expansion in the manufacturing facilities of The Brunswick-Balke-Collender Co. The famed Brunswick Automatic Pinsetter—the ingenious device that outperforms the now obsolete human pin boy—will henceforth be made in Muskegon.

Having decided to handle the complete manufacturing operation for the pinsetter, the firm turned to Cunningham-Limp for engineering help in working out several possible methods of providing production facilities. (This action was based on Cunningham-Limp's reputation, and particularly its performance in helping consolidate Brunswick's school furniture operations into a new plant in Kalamazoo a year earlier.)

There were many questions to be answered. Brunswick took advantage

of certain Cunningham-Limp "predecision" services including a review of possible sites, building sizes and shapes, plant layout and other factors which would affect the manufacture of the pinsetter. In short, an exhaustive study—an Engineering-Economic Analysis—of the projected expansion to provide Brunswick with the ultimate in facilities to manufacture the Automatic Pinsetter.

When Brunswick made its decision—to build a new plant in Muskegon adjacent to one the firm already owned there—Cunningham-Limp's comprehensive reports played an important part in the analysis of the factors involved.

The new plant was designed, engineered and built by C/L and included production lines as well as modifications of existing structures.

Award of the contract reflected not only their satisfaction with the preliminary report but awareness of C/L's reputation for outstanding workmanship at the lowest practical cost. That reputation, incidentally, is one reason why 90 per cent of our business comes from repeat customers. If your firm is thinking of expanding, moving, or revamping present facilities, contact Cunningham-Limp. Our background in designing, engineering and building for manufacturing and processing industries may save you important time and money. No obligation, of course.

If you are an executive in a manufacturing, processing, distribution, research, or industrial firm, you may wish additional information about Cunningham-Limp services. Send for our illustrated, 78-page brochure, requesting it on your latterhead or business card.

THESE COMPREHENSIVE SERVICES WILL PAY OFF FOR YOU • Engineering-economic analyses • Site selection, planning and development • Plant layout • Machinery moving • Materials handling methods and systems • Equipment design, purchase and installation • Building design and engineering • Building construction, including: Industrial plants • Warehouses • Research laboratories • Chemical process plants • TV and Radio facilities • Power plants • Commercial buildings • Railroad and Utility facilities.

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PERSONAL BUSINESS

BUSINESS WEEK JULY 25, 1959



How broad-or effective-is your concept of "estate planning"?

Suppose you have ample life insurance; your house (free and clear), savings deposits, and U.S. bonds are held jointly with your wife; you have a comfortable amount of additional property, and a simple, straightforward will to dispose of it. Have you an effective "estate plan"?

Maybe not. If you've concentrated solely on these elements, warns a leading adviser, you've likely fallen far short of a fully rewarding plan.

Consider just one major point of planning: the federal estate tax.

Tax is based on the value of decedent's property, with rates from 3% to 77%-a \$200,000 taxable estate, for example, would be hit at a rate of about 25%. Obviously, your clear-cut personal wealth is taxable bank accounts, investments, and so on. This is understandable.

But the bite reaches further than this. Also subject to estate tax are (1) life insurance proceeds paid to your beneficiaries (assuming you still owned the policy at death and thus had cash surrender rights, etc.), (2) jointly held property that passes to your joint owner, and (3) in some cases, property you had already given away.

It's in this last area—lifetime gifts—that the estate tax has its longest reach. There are two major points here:

- · If a man makes a gift within three years before his death, the Treasury may charge that the gift actually was made "in contemplation of death." Thus, even though the donor had paid a gift tax, the property might be subject to the higher estate tax.
- · If a man gives away property but retains some legal interest, the estate tax might be applied. Thus, if the decedent had set up a trust for his children, but had retained the right to revoke it, the trust property would be taxed—even though he never exercised his right.

All of this sounds pretty grim. But the fact is, there are here—as in other estate areas-some things that can reduce or even eliminate the burden, if you are aware and take full advantage of them.

Five deductions reduce the tax: (1) Expenses and debts, including administrative charges, lawyers' fees, the executor's commission, decedent's personal debts, mortgages and liens on property (the remainder is the "adjusted gross" estate); (2) casualty and theft losses during administration; (3) charitable contributions and bequests; (4) the marital deduction, based on the value of property passing to the widow-maximum, 50% of the adjusted gross estate; and (5) a flat \$60,000 exemption.

You get the taxable estate by subtracting these five items from the gross. You compute the tax, then deduct certain "credits"—chiefly state taxes paid, and gift taxes paid on property included in the estate.

What can effective estate-tax planning mean in dollars? For example:

Smith is 55, married, with two children. He has \$10,000 in savings accounts, \$10,000 in U.S. bonds, and a \$50,000 home, all held jointly with his wife; he also owns \$100,000 in real estate, \$100,000 in corporate stocks, and has life insurance coverage of \$100,000-total \$370,000. His will leaves everything to his wife and children in three equal shares.

If he died tomorrow, Smith's gross estate-for tax purposes-would be \$370,000, no less, because it would include not only his personally owned investments, but also the jointly held items, and the \$100,000 insurance pay-off. As for deductions, assume (1) administrative expenses 125

PERSONAL BUSINESS (Continued)

BUSINESS WEEK JULY 25, 1959 and personal debts of \$25,000, leaving an adjusted gross estate of \$345,000; (2) a marital deduction of \$115,000, since he left one-third of his property to his wife; and (3) the \$60,000 flat exemption.

Taxable estate: \$170,000. Tax: \$39,780 (at a 20% rate).

Now suppose a minimum of planning. Say that Smith, before his death, had (1) assigned all title and present interest in his \$100,000 insurance policy to his children (reducing his gross estate by that amount), and (2) revised his will to take full advantage of the marital deduction, now leaving one-half instead of one-third to his wife.

Gross estate would be \$270,000. If you assume expenses and debts of \$22,000, the adjusted gross would be \$248,000. Because of the marital deduction, half of this would be tax free, leaving \$124,000. Finally, subtracting the \$60,000 exemption, you get a taxable estate of just \$64,000.

Tax on this would be only \$10,428-a saving of \$29,352.

Note this: If Smith had made lifetime gifts to his two children (say \$3,000 a year apiece for 10 years), his family could have been spared estate taxes, and he could have accomplished this without paying gift tax.

The gift tax will be discussed more fully in a future column.

Plagued by insomnia? Two new books claim that sound sleep is a gentle art that can be acquired with a bit of knowledge and practice. How to Sleep Well, by Dr. Samuel Gutwirth (Vantage, \$2.95), tells about a method of "scientific relaxation" to enable insomniacs to fall asleep in 30 seconds, and sleep soundly throughout the night.

Sound Ways to Sound Sleep, by Donald and Eleanor Laird (McGraw-Hill, \$4.50), surveys the work of over 50 scientists and comes up with many agreeable sleepy suggestions. The authors also explain a way for you to awaken without "that tired feeling."

Summer medic: A new swimming pool water purifier that won't bleach your bathing suit, irritate your eyes, or offend your sense of smell or taste will go on the market Aug. 1. "DIP" (diatomic iodine purifier) is said to be entirely-safe, highly effective, and easy to use. Cost: \$8 to \$10 a month for a 20-ft. by 40-ft. home pool (Biscayne-Gallowhur Corp.).

The club locker room, no matter how well maintained, may be a source of "athlete's foot." Now a new antibiotic, Fulvicin—taken orally—is said to provide good results in eliminating the infection. The drug is prescription-only (Schering Corp.).

Start packing: Summertime sailings to Europe will be more expensive next year; Atlantic steamship fares will be raised again for the third time in three years—first class up \$20, other classes, \$15. . . . Pan American this week began Boeing 707 jet service between New York and Buenos Aires, joining Aerolineas Argentinas, which flies the British Comet IV jet; round-trip fare for this 5,444-mi. hop is around \$1,000, first class. . . . Washington, D. C.'s Shoreham Hotel expects to open its new 100-room hotel-connected Motor Inn next week. . . . You can get a newly revised guide to some of the luxury hotels and resorts in Europe, featuring late and off-season travel information (no charge); write to Robert F. Warner, Inc., 17 East 45th St., New York 17.



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DAVID LICHTENSTEIN manages fast-growing Liberty Loan Corp. in St. Louis in small loan competition with...



DONALD BARNES, SR., top man at American Investment Co. For 25 years, the two men worked closely together. Now they're . . .

Personal Rivals for Loan Lead

In five years, Liberty has gained strongly under Lichtenstein. But AIC is still far bigger, and still growing, too.

Five years ago, David B. Lichtenstein (picture) was ousted as executive vice-president of American Investment Co. of Illinois. Lichtenstein was bounced by Donald L. Barnes, Sr. (picture), No. I man at AIC, after 25 years of working together—drawing down the same salary to the penny. Together, they had molded AIC into what was then the nation's third biggest consumer finance company (BW-Mar.5'55,p80).

Barnes said the split was over the introduction of modern methods in management. Lichtenstein countered that this was just an excuse, hinted at "nepotism" within the company.

In any case, the wounds of the quarrel haven't healed. Since then, Lichtenstein has moved over to head Liberty Loan Corp. in St. Louis and has turned it into one of the fastest-growing small loan companies in the industry. From the start, he has aimed at whittling the gap separating Liberty Loan and American Investment.

• Narrowing Gap—In the five years, AIC has slipped a notch. At the end of first-quarter 1959, it was fourth in the industry—in terms of notes receivable—with \$227.4-million. It is still far ahead of Liberty, but the smaller company has jumped from 34th spot to about 9th.

By the end of 1958, Liberty's accounts receivable had increased from \$24.3-million in 1954 to \$80-million; they're now more than \$86-million. The total number of accounts was 278,000, compared with 103,000 five years ago. Its average loan outstanding—a real measure of a small loan company's earning power—was \$287, compared with \$236 five years ago.

• Still Stockholder—Still, Lichtenstein might be expected not to want AIC to lose too much ground to its competitors. Through family accounts, he is

the second largest stockholder of AIC—with some 175,000 shares. His friends and associates control another 600,000 to 800,000, giving him roughly 20% of AIC's outstanding common. That the intercompany dispute is very much alive, however, is clear from two law suits filed in recent months.

One suit by Public Finance Corp., an AIC subsidiary, charges a number of its former employees now working with Liberty in California with inducing or seeking to induce other Public Finance employees to join Liberty. PFC asks an injunction and/or damages for more than \$2-million.

The other suit is by Lichtenstein against AIC. Tired of what he considers AIC's legal baiting—Public's is the third law suit involving AIC and Liberty over the past five years—Lichtenstein seeks a court order compelling AIC to pay him a pension of \$24,000 a year and to honor a stock option plan granted him while he was at AIC. The suit, incidentally, was filed just a few days before the expiration of a five-year

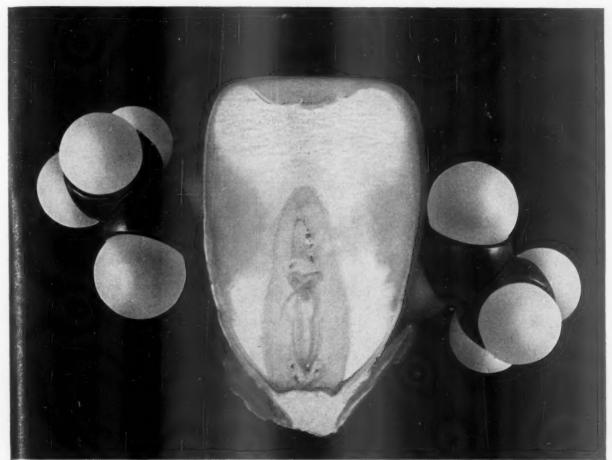


Illustration of the magnified kernel of corn courtesy of CORN INDUSTRIES RESEARCH FOUNDATION, INC.

How 'new chemistry' is finding new uses for corn

The potential of corn as a chemical raw material fires the imagination because of its huge and annually replaceable supply. The U. S. crop alone in 1958 was over 33/4 billion bushels, or over 200 billion pounds.

'New chemistry' applied to corn is constantly creating new chemical products from the basic components of corn—starch, oil and protein.

Corn starch combined with vinyl acetate polymers and copolymers in emulsion form is now the base for improved results in papermaking, textile and adhesive industries. It is also leading to new chemical, plastic and other industrial uses. Starch can now be made in the form of flexible transparent films and coatings with promising wide applications.

Corn starch leads all other starches in usage. Last year, wet millers like National produced over 2 billion pounds of starch from corn.

National is a major producer of starch specialties through 'new chemistry'— a result of selective research and development.

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"buttoned up" by 24 Saginaw b/b Screws

Buttoning up the "overcoat" for the Jupiter IRBM is a cinch for the Saginaw Ball Bearing Screwl The "overcoat" is a portable prefab standby shelter designed by Barnes & Reinecke, Chicago, and Engineer Research and Development Laboratories to protect the missile's tail and personnel working on it. The shelter has 12 base sections with hinged panels raised electrically to form a weather-tight seal around the Jupiter's hull.

The Saginaw b/b Screw converts ratary motion into linear motion with over 90% efficiency. This enables the Saginaw Screws to dependably raise or lower these panels—and hold the shelter securely in place—even in the face of 76 mph hurricane winds. In fact, each Saginaw Screw is able to withstand a combined wind and weight stress of almost five tons! Another great advantage of the Saginaw Screw is the substantial savings in space, power and weight which make the shelter easier to transport and assemble.

The Saginaw Screw may be able to give your products that valuable Sales Appeal you're looking for. To find out, write or telephone Saginaw Steering Gear Division, General Motors Corporation, Saginaw, Michigan—world's largest producers of b/b screws and splines.



statute of limitations covering such suits.

• Seeks Pension—Lichtenstein feels this is coming to him. As a peace offering when he was ousted from AIC, he was told he could take a lifetime pension of \$24,000, provided he stayed out of the small loan business. It's that same payment he's seeking now, this time with no string attached.

AIC argues that a retirement pension for a man who had been ousted is difficult to understand.

• Respected Rivals—Despite the suits, Lichtenstein and Barnes refuse to say much about their fight. Both men are respected members of the St. Louis business community. Any further rehashing of past events, the two men feel, would only make matters worse.

Lichtenstein's friends say his pride is hurt. However, the job he has done at Liberty has been rewarding. Not only is Liberty regarded as one of the hotshot companies in the industry, but Lichtenstein's personal fortunes have prospered, too. He and his family hold roughly 197,000 shares of Liberty stock at a cost of some \$1.9-million. Today, the stock is worth about \$6.5-million.

Pre-Lichtenstein, Liberty had only a modest rate of growth. In 1954, in fact, it ran into real trouble. One top operating officer suffered a heart attack; another quit. The company, moreover, barely earned its dividend requirements. So I. H. Levy, now board chairman, who had put Liberty on the block some years before, went hunting for help in

Lichtenstein looked like an ideal choice. At AIC, Barnes' chief job was getting the company known to investment bankers and establishing lines of credit. Lichtenstein was the inside man and, as such, the key operating man in the company. His talents had earned him wide respect, and when word of his ouster leaked out, he received eight offers—one from Liberty.

• Stock Deal—With Levy's consent, Lichtenstein bought 47% of Liberty's Class B common, which had voting power to elect a majority of the board.

Three other AIC officials made the move with him: William A. Gerard, formerly chief of AIC's big St. Louis operations, now vice-president in charge of all Liberty operations; Lyle S. Woodcock, then assistant vice-president of AIC, now vice-president in charge of finance; and Everett B. Best, formerly AIC research director, now assistant vice-president and secretary.

 Time of Trouble—The troubles facing the quartet were many. Woodcock recalls that Liberty was relatively unknown in the major financial markets; it did not, for instance, enjoy a "prime" credit rating at the banks.

"But money was our least worry," explains Lichtenstein. In the first day



Whirlpool names Sharon "Supplier of the Month" three successive times

"Sharon's ability to produce consistent quality, together with the flexibility to match Whirlpool's production requirements have earned for Sharon an unprecedented three consecutive commendations as our Supplier of the Month," stated Richard Powell, General Manager of Whirlpool's Clyde, Ohio plant, shown above left with Stanley R. Burns, works manager.

Whirlpool depends on steel to build better appliances for more people. For the finest, they rely on quality steel like that produced by the Sharon Steel Corporation, Sharon, Pa.



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the new group was in, it was offered \$10-million in extra bank loans. Today, the company has a prime rating, and scores of top-drawer institutions hold its obligations.

Then, as now, the biggest problem was personnel. A small loan company, which concentrates on mass processing of essentially unsecured loans to marginal credit risks, depends on skilled management to stay above water in a highly competitive business. It relies on good personnel to keep loans flowing out and loss experience low.

But qualified small loan men often move to banking, insurance, or Wall Street, where either the pay is better, work load lighter, or the time away from home less.

Liberty set up special training programs, geared largely to correspondence courses. The problem of personnel still is a long way from solution, but at least the numbers are there: Five years ago, the company had 400 employees; today, the payroll is closer to 1,600.

• Expansion-Another stiff problem was getting field offices. Many states clamp a freeze on new small loan companies coming into "overcrowded" areas, so some of the better spots were closed to Liberty. The only way to open them is to grab marginal companies, and Liberty has done that. During 1958 alone, Liberty opened only 11 new offices but acquired 45 others.

When Lichtenstein came in, Liberty had 66 offices in seven states. Now it has 260 offices in 25 states. (AIC has 500 offices in 37 states.)

· Leader Still Leads-Despite Liberty's growth, it is doubtful that it can catch up with AIC. True, it has moved fast since Lichtenstein took over, but no small share of its success can be accounted for by the growing use of con-sumer credit. Moreover, it was then moving at a snail's pace, so that any stepup in its business looked impressive.

AIC is one of the giants of the industry, and it hasn't been standing still. It still has a long lead. In 1958, its loan volume reached \$341.6-million, compared with Liberty's \$118.8-million. Its number of loans advanced was 966,285 against Liberty's 358,297

Liberty does have several things in its favor. For one thing, on its present base of \$34-million in capital funds, Woodcock figures the company could increase its receivables another \$25-million without additional financing. And Liberty is moving into new fields-credit life insurance and disability insurance-that promise rich rewards.

Thus, it's conceivable that Lichtenstein will maintain Liberty's growth rate. Even so, it will take a long time before it starts breathing down AIC's neck. But the very fact that AIC is way out ahead is what is making Liberty run. END

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In Finance

Railway Express Gets Reprieve As Roads Ease Rules on Routing

After months of bickering that threatened to put the Railway Express Agency out of business, the 178 railroads that own it have reached agreement on a plan to

keep it in operation.

Under the agreement, Railway Express will finally get long-sought freedom to route shipments in the most economical and efficient manner, rather than according to "historical patterns" based on typical movements in the 1970s

The agreement also provides significant changes in the method of payment to the railroads for hauling Railway Express freight. The new methods will mean, in effect, that Railway Express for the first time, will have an accurate cost accounting system. It will be able to relate payments closely to services rendered. This should effectively scotch complaints of Eastern roads that they were not being paid in proportion to their out-of-pocket expenses on shipments.

Hughes Confers With Capital Airlines On Purchase of Undelivered Jets

Howard Hughes was closer to getting off the financial hook this week. Officials of Capital Airlines said they have conferred with Hughes Tool Co.—which owns 78% of Trans World Airlines—about the possibility of purchasing six Convair 880 jet liners—valued at \$3.5-million each—originally intended for delivery to TWA.

In a similar arrangement three weeks ago, Pan American World Airways said it would buy six Boeing jets ordered for TWA by Hughes Tool (BW-Jul.4,'59,p26). In turn, Hughes Tool obtained an option on six shorter-

range jets belonging to Pan Am.

Hughes has sought \$250-million in long-term financing from Wall Street bankers to pay for 60-odd jet planes the company has on order. The Pan Am transaction reduces his immediate needs by \$40-million. The Capital deal would trim off another \$21-million.

If a deal is made, Capital could have new turbojet planes earlier than planned. But the deal hinges on

Capital's own financing problems.

Big Name Financiers Buy Land Holdings in Florida

The list of big, impressive names attracted by the

Florida land boom grows daily.

Universal Marion Corp., equipment manufacturer controlled by Louis E. Wolfson, announced last week that it plans to buy a 12,000-acre tract near Tampa. It plans to exchange \$4.3-million of a new convertible pre-

ferred stock issue for the land, which will be used for residential and industrial development.

Winrock Enterprises, Inc., of which Winthrop Rockefeller is a major stockholder, has purchased 1,750 acres of bayfront property in northwest Florida. George M. Reynolds, president, says the land was bought for investment, but he says it's suitable for recreational and retirement home development.

The Murchison interests have provided "financial assistance" for building contractor Louis Borlanti in the purchase of six islands in Boca Ciega Bay, St. Petersburg. A spokesman for the wealthy Texas family admits that the Murchisons put several million dollars in the project, says "we hope to make an entire city on the islands."

New Haven Seeks ICC Loan Guarantee— But Without Any Strings Attached

The New Haven RR moved in two directions this week in an effort to get out of a financial squeeze.

It asked the Interstate Commerce Commission to speed approval of a federal guarantee of loans totaling about \$10-million—but without the strings that ICC has wanted to attach. In particular, it asked ICC to drop its demand that the road postpone for five years an agreement to repurchase 131,000 shares of its own preferred stock from a New York-Chicago investment banking syndicate this fall at \$75 per share. These shares currently sell for about \$15 in the market.

It also pushed negotiations with the investment syndicate to see if it could settle at substantially less than the \$75 repurchase price. The repurchase deal—which grew out of a 1955 financial crisis when the New Haven was strapped for cash to pay for hurricane damage repairs—has been attacked by the ICC as an "illegal issuance of securities" (BW—Nov.22'58,p38). This action, which could nullify the whole contract, threatens to drag on in federal court for years.

But officially, the New Haven says it can't pay the syndicate until legality of the contract has been settled.

Finance Briefs

The Dime Savings Bank of Brooklyn is the first New York City savings bank to seek state permission to increase its rate on savings deposits to 3½%, effective Jan. 1. Brooklyn Dime, like many of the city's other savings banks, now pays 3½%. Many savings banks are planning to raise their rate to 3½% on Oct. 1, and may also seek an increase to 3½% by Jan. 1. The state's banking superintendent, G. Russell Clark, has scheduled a special meeting of the banking board to consider the rate issue in early August; Clark could move to veto the 3½% rate if he thought the bank's earnings were insufficient.

Georgia-Pacific Corp. won its battle with U. S. Plywood Corp. for control of Booth-Kelly Lumber Co., Springfield, Ore. (BW-Jul.18'59,p45). G-P announced that holders of 98% of B-K's 21,889 shares had accepted its offer of \$4,250 a share for their stock. U. S. Plywood had offered to buy all the assets for \$85.5-million, or \$3,906.07 a share.

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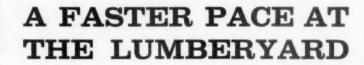
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BUSH

His Goal for AEC Is Fast Action

Chmn. McCone's burial of hatchet with Congress speeds his power program—while he spurs AEC itself to new activity.

The new hero of the atomic power industry is a sober, 57-year-old Californian with a flair for compromise. In just a year as chairman of the U.S. Atomic Energy Commission, John Alex McCone (cover) has ended a feud that had virtually stopped progress in atomic power development for several years.

The long siege of wrangling between the commission and members of Congress got in the way of people trying to abusiness with AEC for several reasons. First, it took up so much of the commission's time that decisions important to businessmen were delayed. And since policy matters were at the heart of the row, the future of the business, particularly of atomic power, was impossible to foresee.

All this is changed today. Starting with the toughest nut, McCone has hummered out an agreement with the "watchdog" Joint Congressional Committee on Atomic Energy on a power development program. Whatever else that program is, it spells action for an industry that has had little of that commodity for some time.

The peace with Congress promises to be enduring—and to remain undisturbed for at least some time to come. While not enthusiastic about some of McCone's ideas, the Joint Committee has indicated that it will not give him the hard time it gave his predecessor, Lewis L. Strauss. Peace with the committee means peace with the Congress, which follows the committee's lead on atomic legislation.

Now the commission is back to tamer, but more productive, work. No longer forced to fight a holding action against congressmen, the staff is busy planning improvements in its operations, which currently are running at a \$2-billion-a-year clip. For example, the staff is coming up with a schedule for decreasing atomic power costs over the next 10 years. The report will be completed early next year.

I. Atom Power Policies

Surprisingly, peacemaker McCone has dickered away little of AEC's old policies. Instead, he has actually added to the agency's stature. It is clear now, for example, that the commission—not Congress or industry—is going to lead the quest for cheap electricity from the atom.



COMPROMISER-John A. McCone, AEC chairman, tried soft approach to Democratic majority on Congressional Atomic Energy Committee-and got just about all he asked.

In this field, the commission will welcome constructive suggestions from anyone, and it will certainly woo the favor of the Joint Committee for AEC ideas. But decisions on what kinds of atomic power plants will be built and when will be made by the commission.

• What It Was About—Though there were other points of disagreement, atomic power development was the big bone of contention between AEC and the Joint Committee on Atomic Energy. The commission had committed

itself to building small experimental power reactors to prove out their technical feasibility. Then it asked industry to build larger plants.

AEC got several takers. Electric utility companies now have four big nuclear power plants in advanced stages of construction, and several smaller jobs are in the works. But this was not enough to satisfy the Joint Committee. It urged AEC to build large plants itself.

There the matter stuck. Work went

". . . if the new approach gave anyone the idea that McCone was a pushover in a scrap, that misconception got itself buried last month . . ."

(STORY on page 137)

on at existing atomic power projects. Some new plants even got onto the drawing boards. But the vigor went out of the AEC-directed program. AEC's leaders were too busy arguing with congressmen. People in the utility and atomic equipment industries waited disconsolately for the squabble to end one way or the other.

• Enter McCone—John McCone was well aware of what he was getting into when Pres. Eisenhower tapped him to succeed Strauss as AEC chairman last year. But he knew his way around Washington's political bogs, having done a stint as special deputy to the Secretary of Defense and as Under Secretary of the Air Force in the Truman Administration.

Gray-haired McCone looks like exactly what he is, a serious-minded engineer and businessman. Sincerity almost radiates from the man. Right at the start he told the Joint Committee he intended to work closely with its members. It was not long before he had them believing him.

• Fast Service—He speeded the thaw by stilling the committee's long-standing gripe that AEC was reluctant to give it information. Congressional questions that used to take weeks to answer now get replies the same day or the next.

"It keeps us hopping," an AEC staffer comments, "but you have to admit it has improved our relations with the committee."

• Nominee—Another indication of improved relations is the fact that the Joint Committee's chairman, Sen. Clinton Anderson (D-N. M.) expects no confirmation trouble in the Senate for Pres. Eisenhower's nominee to fill the vacancy on the AEC created by the resignation of Commissioner Willard F. Libby.

The President last week nominated Dr. John Harry Williams, director of AEC's Division of Research, to serve out the unexpired two years of Dr. Libby's five-year term. Though appointments to the commission are made by the President, McCone obviously had a hand in the selection-the first new nomination to go to the Senate since he became AEC head. Williams has headed AEC's research since early 1958; he came to the commission from the University of Minnesota, where he had directed the proton linear accelerator project the university is conducting for AEC

• Shrewd Bargainer-But if the new approach to the Joint Committee gave anyone the idea that McCone was a pushover in a scrap, that misconception got itself buried last month. That's when the Joint Committee approved a schedule of AEC activities for the fiscal year that started July 1.

It provided more than McCone had requested for atomic power development and for basic research. It included a project or two that he thought could as well be put off for another year. But, basically, McCone got just about what he asked for.

• Big Issue—On the big issue of government or business development of atomic power, McCone pulled a surprise. Until cheap power from the atom is at hand, he proposed, AEC will select particular reactor types to be built. It will ask industry, including publicly owned organizations, to build these plants. If it gets no takers, the commission will build them itself.

But these will be prototype plants, rather than large-scale power producers. A fairly good guess at the size would be in the range of 20,000 to 80,000 kilowatts of electric capacity. The commission would entertain proposals from industry for other plants, but clearly the prototype program would be its first love. And when cheap power is attainable, industry would be glad to build full-scale plants on its own.

• Action, at Last—McCone never would have made this approach stick but for the fact he brought in a schedule of construction to be started right away. It included, for example, a gascooled plant to be built by AEC, an organic cooled reactor, a process heat plant, and a special small power project designed to determine how cheaply a small reactor—in the range of 5,000 kw. to 40,000 kw.—can be built.

Here, as one congressman put it, was "action, at last—not as much as I wanted, but action." So the committee added a few projects and gave the program its unenthusiastic blessing.

• Realistic View—McCone has no delusions about the popularity of his program with the Democratic majority of the Joint Committee. He plumped for prototype plants because "we must get the answers to some technological problems before we can achieve economic power." This, he feels, can be done with prototypes, saving the heavy costs of a series of large plants.

But several members of the Joint Committee have their fingers crossed, still want large, government-built plants. They will give McCone time—at least, a year or so—to show them some results. And they'll keep urging him to build, or get built, more power reactors than he deems necessary. But they won't let another argument stall his program.

 Mixed Reactions—Industry reactions range from a grudging "as good as could be expected" to mild enthusiasm. Everyone hailed the end of the feud—"the biggest mess we had to live with," says an executive of an atomic equipment company.

A utility company man expressed mild horror at McCone's willingness to build some government atomic power plants, even small ones; while a senator, who wanted many big government plants, calls it "a Milquetoast program." But there's no denying that, with nine scheduled reactor projects, the atomic equipment industry should begin to show some life, and some steps toward cheap atomic power should be made.

II. Stirring Up AEC

Already there is considerably more scurrying going on at AEC headquarters in Germantown, Md., 25 miles northwest of Washington. The power reactor planners are especially busy.

Of course, part of this bustle is because the new boss is generally in a hurry. Just as he wants fast action for Congressional requests, he wants the rest of the commission's business conducted in a smart fashion.

He is a bear, too, says one staffer, for details: "A lot of information on a matter won't do. He wants all the available information. So we have to do our homework—and do it in a helluva hurry sometimes."

• Change of Guard—As has happened before, a number of top hands left the commission when the new chairman took over. Among these were the general manager and the two top men of the reactor development staff. Most of these men have been replaced, but the shifting of replacements required the taking on of inexperienced hands in the lower echelons.

This is one headache of Air Force Gen. Alvin R. Luedecke, the new general manager. It comes at a bad time because he is trying to strengthen the staffs of the operations offices, which handle day-to-day contacts with AEC contractors in the field.

AEC staffers—there are slightly over 7,000 of them—manufacture nothing. They negotiate with, then keep tabs on the contractors who make materials for weapons, build and operate commission plants, and carry on research for AEC. Much of this work is done by the operations office.

Luedecke wants these field offices to carry even more of the load. That's why he is sending them more people, particularly men trained in reactor operations. These specialists will help pros-

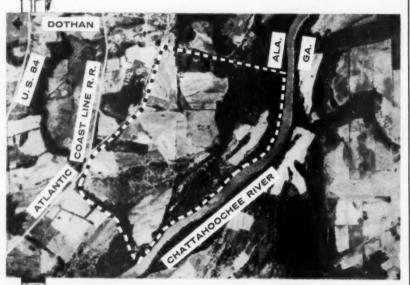


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R. P. JOBB Assistant Vice President Dept. J-79 Atlantic Coast Line Railroad Wilmington, N. C. pective reactor builders with design work, hammer out details of contracts.

• Licensing Grows—More people will be needed, too, to handle the mounting burden of inspecting licensed facilities. The commission licenses all uses of radioactive materials, from small medical devices to big reactors. There are regulations for all these uses, and someone must see that they are observed. Lucdecke expects to be dealing with

10,000 licensees a year from now on.

Luedecke is aware of complaints, started long before his arrival, that too much of the commission's business has to cross the general manager's desk. He'd like to eliminate any red tape, but he points out that, with plant and raw materials inventory of \$7-billion, AEC is big business. Someone has to manage it as such, so Luedecke plans to keep his fingers on quite a bit of it. Certainly all major projects will continue to get his scrutiny, as well as anything politically or legally sensitive—and that covers the bulk of AEC's activities.

• Busy Staff—Among others, he will watch his reactor development staff closely. This crew now has to put into action the power plant program that McCone brought back from the Capitol. For example, it already is supervising the search for a builder for the 25,000-kw. gas-cooled reactor to be built at Oak Ridge, Tenn.

Besides riding herd on designs and construction contracts for reactors, this group, headed by Frank K. Pittman, watches progress on reactors being built by the commission, checks research and development work, and recommends new projects and policies to AEC.

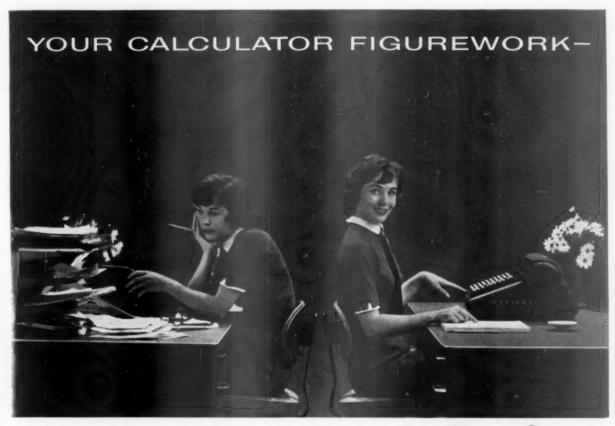
• Promotion Crew-Another busy group is the new Office of Isotopes Development, headed by veteran Paul C. Aebersold. AEC produces radioactive isotopes in its reactors, sells them to companies that process and package them. It is thus a step away from the eventual customer who uses them for gauging, medical uses, scanning, sterilization, or other purposes.

Before McCone arrived on the scene, AEC had made a study of how it could boost isotope sales. Now it is putting its plans into action. A course at Oak Ridge National Laboratory aimed at training technicians in research and medical applications has been replaced with a six-week course designed specifically for industrial users. Four such courses will be conducted at Oak Ridge each year. The first two attracted capacity student bodies—32 people.

do

The office also has started a series of two-day meetings on industrial uses in cooperation with universities and other interested groups. These sessions have inspired requests for more information from AEC.

• Industry Ideas-Last September, AEC



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began offering contracts for development of new industrial uses of isotopes and of new techniques. It has handed out contracts worth about \$2-million for more than 50 studies of this type.

III. Cautious, but Confident

What all this bustle at AEC will produce is a little hard to predict. But it will continue. McCone has established the notion around the premises that he is a man who expects results. · Fond Expectations-The atomic industry has seen but little of McCone, except in consultations on matters of policy that he wanted to present to Congress. But it looks approvingly at his record as first president of the big West Coast engineering company, Bechtel-McCone Corp., now Bechtel Corp., as boss of a big World War II shipyard, and as president of Joshua Hendy Corp. There is nothing in that to frighten a businessman.

McCone is in full accord with a more cautious commission attitude on prospects for cheap atomic power that began forming before his arrival. Staff people have come more and more to feel that both the public and industry expected too much, too soon. They feel that, somehow, they should have guarded better against such over-optimism.

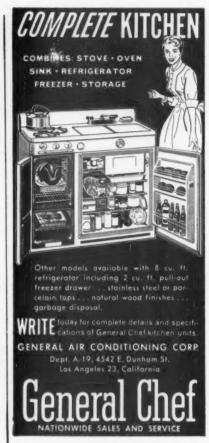
• Ten Years Away—They certainly are not beating the tubs now. McCone himself predicts atomic power that would be competitive in high fuel-cost areas "in 10 years." The generating cost would run between 8 and 10 mills, or 3 to 5 mills more than the cost of power from many modern conventional plants.

The reactor development staff has been getting estimates of power cost from several types of reactors. It has insisted that the estimates must be based on realistic figuring for financing charges, plant load factor, interest charges during construction. It says the estimate of 8-mill power in 10 years is based on such studies.

There probably is some overcaution in this prediction, but the recent experience of reactor builders would seem to bear it out.

• Confident—Despite his caution, McCone is confident that nuclear power eventually will be cheaper than power from conventional fuels. Technological advances in the nuclear field will be abetted, he feels, by inflationary pressures on conventional plants and fuels.

"I cannot conceive that inflationary pressures will affect atomic power plants in the near future," he explains. "Despite present high costs, every indication now is that atomic costs are headed the other way. Already the cost of uranium, the basic fuel, has gone down. We are developing improved fuel elements of greater efficiency." END



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Labor Disputes and the White House

The strike by a half-million steelworkers against mills that normally produce more than four-fifths of our steel brings up, once again, the vital question of the federal government's role in labor disputes.

The Taft-Hartley Act gives the President power to bar for at least 80 days any stoppage that affects all or a substantial part of an industry and that, in his opinion, imperils the nation's health or safety.

Pressure already is building up on the White House to invoke this "national emergency" power. Pres. Eisenhower wisely has decided not to intervene directly. However, he has allowed Secy. of Labor Mitchell to embark on a fact-finding study of "circumstances surrounding the steel strike."

This could prove a convenient way out of a difficult situation for the Administration—provided the Mitchell study does not become a direct intervention in the bargaining process. The danger is that in its efforts to settle a costly and painful strike the White House will be under pressure to throw away some of the basic principles of sound labor policy that it has established during the past six years.

The hardship for the steelworkers and for the employees of such industries as the railroads and trucks is very real. However, there is nothing that makes the steel strike an immediate threat to the country as a whole. Some consumers will be hurt, but generally steel stockpiles are big enough so that a shutdown into August will hardly slow major steelusing industries. Coming as it does just when business is shaking off the last effects of the 1957-58 recession, the strike is bound to cause some concern about business in general. But the fact is, historically, that no economic recovery has ever been halted by a strike, no matter how big.

Presidential intervention would stop the steel strike, but it would put the country's labor policy on a dangerous road. It would be an unfortunate entry into the area of free and voluntary collective bargaining that is the heart of U.S. labor-management relationships.

Where Presidential intervention in labor disputes is called for, by law, as in the transportation industry, bargaining has been weakened. Before 1952, when Taft-Hartley "emergency" powers were invoked more freely, this was also true of basic industries. The present Administration changed that; it shut White House doors on labor disputes.

The doors should not be reopened.

It is a great pity that steel management and labor could not settle their differences without a strike. But their obligation to bargain did not end when the strike began. It became more urgent.

In the public interest, idle mills and workers must return to production. And it is in the best public interest that steel management and labor get them back by resuming earnest and meaningful bargaining. It is their responsibility to do so. They cannot pass that responsibility along to the President, Congress, or any other source of federal power.

Object Lesson

Columbia Broadcasting System may have been a little disingenuous last week when it suddenly announced that it would have to bar Sen. Hubert Humphrey from its "Face the Nation" program on the grounds that he is an actual, if unavowed, candidate for the Presidency (page 24).

But even if the fine hand of the strategists showed a bit, CBS certainly succeeded in demonstrating the utter absurdity of the "equal time" role as interpreted by the Federal Communications Commission. The great networks are, and should be, nonpartisan. But it is ridiculous to say that this means that news programs and panel shows should be forced to give the same number of minutes before the camera to each and every citizen who wants to call himself a candidate for public office.

The CBS decision should put some real steam into the Congressional drive to amend the equal time rule before the drums start beating for the 1960 election. Bills have already been introduced in both House and Senate to accomplish this (BW—Apr. 11'59,p148). As a matter of simple self-interest if nothing else, Congress should get this bit of business cleaned up.

Warning on Prices

Policymakers of every business in the country would do well to take heed of the latest consumer attitude study by Michigan University's Survey Research Center (page 28).

It shows clearly that consumers are extremely conscious of prices and the effect they have on their financial well-being. Although almost half the sampling of families in the Survey Center's study expect increases, they view this as "bad."

In pure theory, the now-debunked economic man should buy if he expects prices to rise. But when interviewers asked them what they might do to protect themselves against rising prices, a significant proportion of consumers said they would stop buying, make do with what they had.

Now that the economy is expanding again, there are indications that some industries that are enjoying improved sales are ready to test a price boost. Costs climb, and an easy way out of the resultant profit-squeeze is to pass them on to consumers. Easy, that is, if consumers continue to buy. Stocked with goods as they are, it is just possible they won't buy—unless the price is right.

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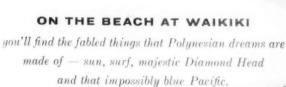
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